

**SHROPSHIRE COUNCIL  
STRATEGIC PLANNING COMMITTEE  
Monday 26th July, 2010**

**APPLICATION REFERENCE SC/MS2009/0125/SY**

**DEVELOPMENT OF AN ENERGY FROM WASTE FACILITY  
FOR THE COMBUSTION OF RESIDUAL MUNICIPAL AND  
SIMILAR WASTES AND THE ERECTION OF ANCILLARY  
BUILDINGS AND PLANT AND EXTENSION TO THE EXISTING  
HOUSEHOLD RECYCLING CENTRE**

**VANGUARD WAY, BATTLEFIELD ENTERPRISE PARK,  
SHREWSBURY. VEOLIA ENVIRONMENTAL SERVICES LTD**

**OFFICER APPRAISAL REPORT**

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Committee and date

Item

Paper

**STRATEGIC PLANNING  
COMMITTEE**

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## Development Management Report

**Application Number:** SC/MS2009/0125/SY

**Parish:** Shrewsbury

**Grid Ref:** 361218 - 299456

**Proposal:** Development of an energy from waste facility for the combustion of residual municipal and similar wastes and the erection of ancillary buildings and plant and extension to the existing household recycling centre.

**Site Address:** Vanguard Way, Battlefield Enterprise Park, Shrewsbury

**Company:** Veolia Environmental Services Limited

**Case Officer:** Mr Grahame French **email:** [planningdmc@shropshire.gov.uk](mailto:planningdmc@shropshire.gov.uk)

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### 1. REPORT SUMMARY

1.1 It is proposed to establish an Energy from Waste Facility (EWF) at the Battlefield Enterprise Park in North Shrewsbury adjacent to an existing waste management facility which became operational in 2005. The facility would burn approximately 90,000 tonnes of residual municipal and similar wastes per year and would generate electricity for export to the national grid. The proposed EWF building has been designed to a high architectural standard. It would be a maximum of 28m high with a slender 65m chimney incorporated within the building. The EWF would form part of the new integrated waste contract which was awarded to the applicant company Veolia ES Shropshire Ltd (VESS).

1.2 The application is accompanied by an Environmental Statement (ES) which considers the main potential impacts of the scheme and puts forward associated mitigation measures. The application has been subject to extensive consultations and has attracted a substantial number of objections and representations. Particular issues highlighted include amongst other matters health and pollution concerns, objections to the incineration process, consideration of alternatives, traffic, ecology and effects on the nearby historic battlefield site. The applicant subsequently prepared further information on these and other subject areas. The following conclusions can be drawn following a detailed analysis of relevant information submitted in respect of the proposals:

- The proposals are not completely in accordance with the the Shropshire Waste Local Plan and were advertised as a departure from the Developmet

Plan. However, it is considered that they represent a practicable and potentially acceptable waste management solution having regard to relevant waste management criteria. In particular, it is considered that the EWF proposals would be capable of forming a key part of a waste management network which would support increased diversion of waste from landfill in order to achieve and exceed current recycling targets. It is considered that sufficient material considerations apply to justify a departure from the specific processes listed in the relevant Site Profile linked to Waste Local Plan Policy P6.

- Currently residual municipal waste is landfilled outside of the County. However, relevant policies and guidance indicate that continued landfilling is not a sustainable future waste management option and provide strong support for the need for a facility capable of processing residual municipal waste. The proposed EWF would be capable of meeting this need.
- Available forecasts support the conclusion that the proposed EWF has been sized appropriately to take account of anticipated residual waste levels in Shropshire without undermining efforts to achieve greater recycling and reduction of municipal waste. This is having regard to opportunities for increased recycling and the potential implications of predicted household growth. The proposed facility would form part of an integrated system for managing municipal waste and would only deal with the residual waste which remains after other recycling measures have been applied.
- It is considered that available evidence supports the conclusion that EWF represents the most appropriate solution for dealing with Shropshire's residual municipal waste. Alternative thermal treatment technologies on the scale required are not yet proven in the UK. The applicant has also highlighted technical complications of alternative processes such as MBT, including contamination of recyclates and the requirement to landfill significant volumes of residual waste which cannot be recycled by such plants. The justification for MBT is also questioned in circumstances where high levels of recycling are already being achieved through the kerbside collection route.
- It is considered that available evidence supports the conclusion that no other more suitable sites are available having regard to key waste management criteria. The site is allocated for waste management uses in the Waste Local Plan and is next to an existing waste site which offers co-locational benefits. It is also at the geographic centre of Shropshire's waste management network on an established enterprise park with good access to the primary road network and is of sufficient size to accommodate the proposed development.
- It is considered that the proposal is consistent with the key tests set out in PPS 10 and the principles of managing waste higher up the waste hierarchy, regional self-sufficiency and the proximity principle. In addition, the EFW process would allow renewable energy to be recovered as electricity and offers the future potential to utilise heat in a district heating scheme.
- The Environmental Statement and associated further information deal appropriately with relevant planning matters including need, throughput, alternatives, site layout, ash recycling, air quality and health, energy

efficiency, carbon footprint, building design, traffic and transport, visual amenity, wind effects, ecology, cultural heritage, hydrology and drainage. It is not considered that any of the potential impacts of the scheme would have sufficiently adverse effects to justify refusal when available mitigation measures and relevant policies and guidance are taken into account.

- With respect to air quality the proposals would be strictly monitored and controlled under the Permitting process administered by the Environment Agency. With respect to health issues, a recent statement by the Health Protection Agency concludes amongst other matters that 'modern, well managed incinerators make only a small contribution to local concentrations of air pollutants'. Whilst the concerns of local objectors are acknowledged, it is not considered that an objection on the grounds of air quality or health could be maintained by the planning authority.
- With respect to landscape and visual effects, the proposed EWF building would be taller than other buildings on the business park, but would be designed to a high standard with features to reduce the visual impact. Planting both within and off site would gradually integrate the development with the surroundings. It is not considered on balance that an objection could be substantiated on grounds of visual or landscape impact.
- With respect to cultural heritage, following discussions with English Heritage the applicant has put forward a package of additional measures to mitigate any residual effects on the nearby historic battlefield site. English Heritage has studied the further information and other commitments and has withdrawn its objections on the basis of these additional matters. It is concluded that the proposals can be accepted in relation to relevant development plan policies and guidance relating to cultural heritage.
- With respect to traffic, the industrial estate roads surrounding the site are operating at well below capacity. These roads have been designed for heavy vehicles and can therefore accommodate the types of articulated vehicle which would visit the proposed facility. The applicant has agreed to accept a routing restriction and to implement a transport management plan in order to pursue more sustainable transportation options. In addition, the proposals would facilitate improved internal circulation arrangements. It is considered that the proposals can be accepted in relation to highway and traffic considerations.
- With respect to monitoring and control measures, the development would be regulated and monitored by a number of statutory bodies including under a Pollution Prevention and Control Permit issued by the Environment Agency. It is also proposed to establish a local liaison group in order to provide feedback and reassurance in relation to site operations.
- With respect to ecology the Environmental Statement concludes that suitable mitigation measures are available to prevent adverse effects. A nearby badger sett would be checked prior to construction and a licence would be obtained if necessary. Measures would be put in place to provide mitigation for the loss of foraging habitat for Great Crested Newts. The applicant's management plan for the river corridor would result in an ecological improvement relative to the

current situation. With respect to protected ecological sites a Habitat Regulations Assessment has been undertaken. An associated Appropriate Assessment concludes that emissions from the proposed EWF would not be significant with respect to acid and nutrient nitrogen levels at Hencott Pool Ramsar site 1.7km to the west. This is taking account of the further clarification provided by the Environment Agency as the appropriate technical body for air emissions. It is concluded that the proposals comply with relevant wildlife legislation with respect to the potential effects on protected species, habitats and wildlife and can also be accepted in relation to relevant policies, guidance and legislation covering European protected sites.

1.3 It is considered that the proposals would comply with Waste Local Plan Policy P17 (Energy Recovery Facilities) in that they would be capable of making a beneficial contribution to a sustainable waste management system for Shropshire without undermining the provision of waste management facilities further up the waste hierarchy. It is also considered that the proposals are in general accordance with other relevant policies in the Development Plan for the reasons stated above, including in relation to cultural heritage, ecology pollution and health. With respect to the key principles set out in PPS10 it is considered that the proposals would amongst other matters:

- meet a clearly identified need, allowing Shropshire to take responsibility for its own residual municipal waste within an overall system which is designed to ensure that waste management moves up the waste hierarchy;
- help implement the national waste strategy and supporting targets;
- enable recovery of waste in one of the nearest appropriate installations without endangering human health or harming the environment;
- support sustainable waste management through the design and layout of the proposed EWF.

1.4 Whilst the proposals for the site do not comply fully with specific types of waste management process listed in the Waste Local Plan site profile, it is concluded that on balance they represent an acceptable use of the site which is capable of complying with other relevant development plan policies, guidance and material considerations. This is provided detailed planning conditions are imposed and the applicant enters into a legal agreement to cover issues including traffic management, off site works, ash recycling and future district heating measures.

## **2.0 THE PROPOSAL**

2.1 Introduction The application seeks to establish an Energy from Waste Facility (EWF) at the Battlefield Enterprise Park in North Shrewsbury. The proposed facility would burn residual municipal and similar wastes in order to generate electricity for export to the national grid. It would be located adjacent to an existing waste management facility which became operational in 2005 and currently comprises a Waste Transfer Station incorporating a dry waste recycling facility and a Household Waste Recycling Centre.

2.2 Background The proposed EWF would form part of the new integrated waste contract for Shropshire which commenced on 1<sup>st</sup> October 2007. The contract was awarded by the Shropshire Waste Partnership to the current company Veolia ES Shropshire Ltd (VESS). Shropshire Council owns the application site but this does

not preclude the Council as the local planning authority from determining the application.

2.3 Main Details The main element of the scheme is an Energy from Waste Facility with a design capacity of 90,000 tonnes per annum which would handle mainly municipal waste with some commercial waste. Additional development which is also applied for includes:

- administration block and offices;
- two weighbridges and associated infrastructure;
- modifications to the existing internal road system and staff and visitor parking for 22 cars;
- fuelling area and vehicle washing facilities;
- site landscaping and lighting;
- construction of an extension to the adjacent Household Recycling Centre.

2.4 The EWF incorporates a steam-driven turbine generator which would create up to 8 Megawatts of electrical power for use by the plant and export to the national grid. The applicant states that the plant would have the capability to generate electricity equivalent to requirements of up to 10,000 homes. There is also a potential opportunity to use steam from the generator to supply heat to suitable external users. The main EWF building would include a control room and viewing gallery. A single slender chimney, 65m in height, would be incorporated within the buildings overall structure and located towards the western end of the building. The proposed extension to the Household Recycling Centre would increase its capacity and the range of wastes which the facility can segregate. There will also be improved traffic management, including:

- additional vehicle queuing space within the site for use by the public;
- additional container bays (up to 10 in number) to the east of the existing bays;
- an extension of the elevated parking/unloading area for use by the public;
- an extension of the down ramp for public egress from the HRC.

2.5 EWF Operations It is proposed that the facility would operate continuously, except for planned maintenance. Incoming waste would be stored to supply the furnace during the night and over the weekend. HGV traffic visiting the HRC and EWF would generally operate within the currently approved hours (Household Waste and Recycling Centre - 08:00 to 20.000 Mondays to Saturdays, 09.00 – 18.00 Sundays and Bank Holidays; Waste Transfer Station 07.30 – 18.30 Weekdays, 07.30 – 12.30 Saturdays). Some access and egress would however be required outside these hours in accordance with operational needs. The EWF process would be entirely enclosed within the new building. After being weighed, waste delivery vehicles would discharge their loads into the waste bunker in the tipping hall. A grab crane would then feed the waste into a feed hopper which would discharge the waste at a controlled rate into the furnace. Some of waste materials may require shredding or other mechanical pre-treatment. Wastes would be burnt on an inclined moving grate, which would mix them and inject air to ensure optimum combustion.

2.6 The furnace is designed to ensure a minimum flue gas temperature of 850°C for two seconds to ensure the destruction of all volatile matter. The hot flue gases from the furnace would be used to generate steam which would feed a turbine to

generate electricity. Exhaust steam would be condensed and then returned to the boiler. A number of control systems are incorporated in the process. For example, a reagent would be injected into the boiler to reduce the amount of Nitrogen Oxide in the gas stream. A gas scrubbing system and fabric filters would also be employed to further clean combustion gases before they are released to the atmosphere. The applicant notes that this is designed to comply with exacting EC Directive standards which would be enforced by the Environment Agency, through an Environmental Permit. The 65m chimney has been designed to optimise plume dispersion.

- 2.7 The main residue produced by the EWF would be bottom ash. This would amount to approximately 25% of the input tonnage. Approximately 22,500 tonnes would be produced each year after ferrous metal has been magnetically recovered (3,600 tonnes). Where practical, the ash would be processed to produce secondary aggregates for use in construction and road building projects. Veolia are currently working in partnership to develop a number of strategic outlets for use of this ash. Any unrecycled ash would be sent to landfill. The flue gas treatment (FGT) residues (approximately 3,600 tonnes per year) would be transferred to sealed tankers and transported off site for reuse in chemical processes, or for specialist treatment prior to disposal.
- 2.8 Design and Landscaping The applicant states that the proposed building has been designed to a high quality and in accordance with relevant guidance for waste facilities (Designing Waste Facilities, a guide to modern design in waste – DEFRA / CABE 2008). Native tree planting will provide additional screening and help integrate the development with its surroundings. Access to the Site would continue to be from the existing roundabout on Vanguard Way.
- 2.9 Construction The applicant states that construction would be likely to take 3 years to complete. Work would generally take place between 07:00 - 19:00 on weekdays and 07:00 - 13:00 on Saturdays, although some non-intrusive activities would take place outside of these hours. Site access during construction works would be obtained via the roundabout on Vanguard Way.
- 2.10 Environmental Statement The application is supported by an Environmental Statement (ES) which contains a detailed analysis of environmental issues, including traffic, noise, air quality, landscape and visual effects, natural heritage, hydrology and drainage and community and social impacts. The ES has been prepared to meet all statutory requirements and uses appropriate timescales, techniques and geographical areas of analysis. It deals with all phases of the development including decommissioning. The applicant has also submitted further information on matters including waste management and ecology in response to issues raised during the planning consultation process. The development proposals incorporate a range of measures designed to reduce or prevent adverse environmental effects. The applicant concludes that implementation of the proposed measures will ensure an acceptable development. The issues covered by the ES and the associated further information are considered in Section 10 of this report.
- 2.11 Environmental Permit Detailed site operations would also be controlled by a Pollution Prevention and Control Permit issued by the Environment Agency.

### **3. SITE LOCATION / DESCRIPTION**

- 3.1 The site (area 4.3 hectares) includes the existing Integrated Waste Management Facility (IWMF) and an adjacent vacant plot at the Battlefield Enterprise Park on the northern edge of Shrewsbury (see plan). Vanguard Way is located to the immediate south and links to Battlefield Way / Enterprise Roundabout and on to the A5124 Battlefield Link Road which passes 90m to the north of the site. Levels within the site slope gently towards the Battlefield Brook which runs to the immediate north of the site and has a culvert flowing beneath the Shrewsbury-Crewe railway line 80m to the east. The site is generally devoid of mature trees and shrubs, with the exception of an intermittent row of mainly hawthorn trees and one oak tree along the line of the Battlefield Brook.
- 3.2 The nearest residential area (comprising approx 60 residential and some business properties) is located adjacent to Battlefield Road between 345m and 580m to the east of the site, on the opposite side of the railway embankment. The industrial buildings of ABP are located in an intervening area relative to the nearest of these properties. The noise climate in the vicinity of these properties is affected by traffic on the Battlefield Road and the nearby Battlefield Roundabout. The residential area of Harlescott extends to within 430m to the south west of the proposed site, to the south of Harlescott Lane. The intervening area is occupied by a number of large industrial / business buildings mainly forming part of the Battlefield Enterprise Park, including Stadco, Firmin Coates, Parker Tools and Furrows. Further residential areas in north Shrewsbury extend to within 640m to the south and 710m to the south east of the site with business / industrial buildings in the intervening area. Four isolated residential properties are also located in the generally rural area to the north and north east between 770m and 1km from the proposed site. Residential properties at Upper Battlefield extend to within 1.4km to the north-east.
- 3.3 The existing IWMF was developed by Shropshire County Council in 2004 and comprises a household recycling centre and a waste transfer building. Land to the west of the site has been developed as part of a Food Enterprise Centre. Further land to the north is yet to be developed. A number of other industrial units in the vicinity of the site have also been recently developed or are under construction.

### **4. RECOMMENDATIONS**

- 14.1 That the Council is minded to PERMIT the proposed development subject to the signing of a Section 106 Legal Agreement (the terms of which are listed in section 14c below) and subject to conditions (to include those listed in section 14d).
- 14.2 That the application and related documents be forwarded to the Government Office for the West Midlands in accordance with Paragraph 3(b) of the Town and Country Planning (Development Plans and Consultation) (Departures) Direction 1999 i.e. as the development departs from the development plan and the land belongs to the Council.

### **5. REASON FOR COMMITTEE**

- 5.1 The application relates to a major development proposal under Schedule 1 of the Environmental Impact Assessment Regulations and has resulted in a significant number of objections from residents as well as representations from Parish

Councils and other interested parties.

## **6. PLANNING HISTORY**

6.1 Planning permission for an Integrated Waste Management Facility comprising Household Waste Recycling Centre, Materials Recycling Centre and Waste Transfer Station on land adjacent to and incorporating the current application site was granted by Shropshire County Council on 14<sup>th</sup> January 2004 (Ref: MS2003/0985/SY). The facility opened in February 2005 and has been operated by the current company since 2007.

6.2 Shrewsbury and Atcham Borough Council granted outline planning permission (ref. no. 02/1429) on 1st October 2003 for the use of land to the immediate north and west of the site for organic and non-organic food related B1, B2 and B8 uses (the Food Enterprise Park). Land to the immediate west of the site has recently been developed for this purpose following a subsequent detailed approval. The outline decision notice incorporates a number of conditions which are significant in terms of the current application, including:

- Submission of a landscaping / planting scheme including the provision of a 10m wide landscape belt along the northern and north-western (Battlefield Way) boundaries of the site and completion of the landscape/planting works within 12 months of commencement of any part of the development;
- A restriction in maximum height of buildings to 12 metres to the eaves;
- Submission of a flood mitigation scheme including provision of a balancing pond, which shall be completed prior to the first occupation.

## **7. CONSULTEE RESPONSES**

7.1 Shrewsbury Town Council – Objection on the following grounds:

- i. It is considered that the proposal may be contrary to the Shropshire Waste Local Plan
- ii. The proposed development is considered unsustainable, having regard to the targets and for efforts of both central and local government to reduce waste and encourage recycling.
- iii. The applicants have not satisfactorily demonstrated to the local community that the proposal will not have an unacceptable impact on air quality in the surrounding areas, which could result in health hazards.
- iv. The proposed development would form a visually obtrusive feature by reason of its size/scale and height, which would be detrimental to the general character of the area.
- v. The proposed development, by reason of noise, smell and fumes and general disturbance likely to be generated, would be detrimental to the amenities, which the occupiers of premises within the vicinity of the site could reasonably expect to enjoy.
- vi. The proposed development would result in an over-intensification of the use of the site by reason of the noise and general disturbance associated with the scale of the activities proposed,
- vii. The proposal would generate a substantial increase in heavy vehicular traffic entering and leaving the site, which would be detrimental to the amenities enjoyed by the occupants of nearby residential properties by reason of noise

and general disturbance.

## 7.2 Hadnall Parish Council – Objection on the following grounds –

- i. The Parish Council has grave concerns about, both the potentially hazardous content of the emissions and the possible long-term effect on the health of local residents. The members feel that despite what appears to be comprehensive data supplied with the application, they are unable to form a sound technical judgement on the level of danger presented by these emissions and therefore request that the Shropshire Council investigate and make this judgement on their behalf, based on Shropshire Council's own in-house staff and, perhaps, consultants.
- ii. The Parish Council also have concerns about the increased level of transport both into and away from the site, most of which it is believed will use the A49 in either direction,
- iii. The Parish Council note that adjacent to the proposed site of this incinerator is a new food park. Even disregarding emission issues and possible precipitation, there are apparent issues about whether this constitutes a health risk in relation to fly and rodent infestation.
- iv. The proposed buildings generally, particularly the chimney stack, would appear to be overbearing and obtrusive both from a local perspective and from some distance away. The members request that consideration be given to finishing materials in order to minimise this problem.

## 7.3 Astley Parish Council – Objection on the following grounds –

- i. There is already a surplus of current incineration capacity in the West Midlands (110,000 tonnes for incinerators in operation, plus another 29,000 tonnes per annum at other permitted incinerators being built) even without the Battlefield incinerator. Telford & Wrekin Council used these figures recently to support its refusal for the SITA incinerator at Granville, saying that this will give them breathing space to research alternative methods of waste disposal. Shropshire Council could similarly utilise the spare capacity at Wolverhampton to take waste from the Bridgnorth area, and at Stoke for Market Draytonne.
- ii. Recycling is increasing, and landfill is falling. Building an incinerator will hamper the former (as already evident at Chineham), or additional commercial waste/household waste from other counties will have to be imported. The Parish Council feels that Shropshire Council should resist the temptation to build the Battlefield incinerator to fill any gap left by the Telford & Wrekin decision. Neither must Shropshire Council be allowed to take Telford & Wrekin's waste for burning.
- iii. We also note that Veolia have plans eventually to take kitchen waste for a digestion plant. This will impact on the incinerator waste input!
- iv. There is no reassurance of CO<sub>2</sub> reduction and this is still one of the main concerns of the Parish Council, nor is there any monitoring for radiation. The Parish Council is not mollified by the submission presented and the objections still apply.

When considering the planning application, the Parish Council requests that no regard must be taken of the fact that the Authority had already entered into a contract with Shropshire Council. The Council trusts that their comments will be taken into account regarding this submission.

7.4a) Environment Agency – Response to application as submitted: No objection subject to the following comments:

- i. Flood Risk: The site is within Flood Zone 3 (high probability 1% annual probability floodplain). Small extents are within flood zone 2 (medium probability 0.1%) in the wider area. The Flood Risk Assessment (FRA) in the ES provides a 1% plus climate change flood level of 67.63m AOD, based on Black and Veatch ISIS model. However this is not the most up to date as it was remodelled with the new flow estimate by JBA. The JBA update (2009 audit) 1% flood level is 67.754m AOD. The 1% with climate change level is 67.819m AOD which is 0.189m higher than the Scott Wilson design water level of 67.63m AOD. The latest JBA audit flood levels will be used, to inform a Flood Zone Map update in the near future, as best available information. On this basis the Environment Agency would require the FRA in the EIA to be updated (note: the applicant has subsequently submitted an updated FRA which has been accepted by the Environment Agency).
- ii. Environmental Permitting including Air Quality: An Environmental Permit is required under the Environmental Permitting (England and Wales) Regulations 2007 (EPR). Veolia ES Shropshire Ltd submitted an application for a permit under the EPR at the same time as their planning application was submitted. The applicant will not be permitted to operate the incinerator unless and until such time as a permit is granted, and then only insofar as the conditions in the permit are complied with. During the permit determination the Agency will assess whether the applicant has demonstrated that it will comply with the requirements of both the Waste Incineration Directive (WID) and the Integrated Pollution Prevention and Control Directive (IPPCD). This will require the applicant to demonstrate first that it is using the Best Available Techniques (BAT), and that the incinerator does not result in significant pollution or harm to human health.
- iii. The Agency has sought comments from consultees including Shropshire Council, other interested groups and from the public and on the EPR application. All consultation responses will be considered during the determination process. If the Agency concludes that a permit should be granted conditions will be set reflecting the relevant statutory requirements. If the applicant does not demonstrate an ability to comply with such conditions, the application will be refused. In this way the Agency state that all the relevant environmental considerations for the permit will be properly addressed. The Agency understands that the proposed Energy from Waste Facility (EWF) will be very similar to an existing installation operated by Veolia at Chineham, Hampshire which the Agency regulates. The Chineham plant operates using established and proven technology. In the last 6 years it has complied with its EPR permit conditions including meeting the required emission limit values (ELV's) set in accordance with the Waste Incineration Directive.
- iv. Energy Recovery: The LPA should regard the recovery of energy from the incinerator as a significant factor when considering the location of the proposed development. The Agency expects applications for an environmental permit for an incineration plant to include an explanation of how

energy recovered from the incineration process will be maximised. Normally, as a minimum, this includes the recovery of energy by raising steam for generating electricity. However, to maximise energy recovery, the Agency states that it would also be desirable for the incinerator to recover the remaining low grade waste heat, e.g. through combined heat and power, district heating or the supply of steam / hot water to neighbouring industrial users e.g. Anglo Beef Processors. This requires the presence of potential customers for the waste heat reasonably close to the incinerator. The Agency advises that it will be requesting further information from the applicant about this matter, as part of the permit. A legal agreement may be necessary to secure and deliver this infrastructure. (Note: the applicant has subsequently submitted a 'district heating road map' to the planning authority and has suggested the wording for an appropriate Legal Agreement clause).

- v. Air Quality: The ES confirms the impacts on local air quality as a result of the construction and operation of the proposed EWF. Best practice methods are outlined in the mitigation section. For example, fluctuations in waste streams are controlled by the abatement plant which has the ability to control such inputs. The Agency will regulate the atmospheric emissions from the plant's main chimney stack. The ES outlines best available techniques and based on the air quality assessment considers that a stack height of 65m, as proposed, is required to ensure adequate dispersion of pollutants. The Agency advises that it will be reviewing this in more detail with the permit application. This will include assessment against the requirements of European legislation, developments in technology and an appraisal of pollutants released from the site on local air quality. The Agency states that it should also be noted that the plant has the ability to provide additional controls in the future through any progress in best available techniques.
  
- vi. Pollution Prevention: Operations at the site and measures to prevent pollution will be regulated by the Environmental Permit. The Agency is willing to have further discussions on relevant planning conditions that could be necessary to control certain aspects of the development, along with those that could be covered by the permit. The report indicates that the environmental management at the site during construction would ensure that the risk of any potential impact on water resources will be minimised. It is also indicated that the proposed environmental policy will be implemented through the contractor's Environmental Management System. The Contractor's environmental policy is therefore considered to be critical in protecting the water environment during construction phase of the development. The Agency would welcome a copy of this for review. Details of the site infrastructure will be dealt with during the environmental permit application stage. The Agency states however that it is essential from a groundwater quality protection perspective that all areas for waste handling and operations are underlain by impermeable hardstanding, with a sealed drainage to prevent potential discharge of contaminated water to controlled waters. In particular the waste bunker should be impermeable and regularly maintained to ensure that there is no possibility of groundwater contamination occurring. Appropriate ongoing assessment of the integrity of the bunkers must be undertaken as well as adequate maintenance. The Agency states that these details are likely to be required and controlled by the permit application.

- vii. River Corridor and Surface Water detention basin: With respect to the application as submitted, the Agency states that insufficient information was provided with regard to landscaping of the river corridor (minimum 8 metres buffer strip). The treatment of the watercourse and the design of the detention basin required some further detail and clarification. Further information should also be provided on the future management of this area, to maintain its flood risk reduction and biodiversity benefits (including potential for Great Crested Newts). The existing attenuation pond will be lost but a replacement detention basin is proposed adjacent to the eastern boundary, to accommodate surface water run-off. To fully realise the environmental benefits of such a feature the design should include deeper sump pools (possibility within the meanders of the low flow channel) to allow aquatic wildlife to survive during the drier months. Furthermore, the proposed planting should be altered, replacing *Typha* with *Phragmites australis* as this is ecologically more beneficial plant. The design of the detention basin/pool should seek to replace the habitat lost and to mitigate for any potential impacts on the great crested newt breeding pond by providing suitable breeding habitat within this feature (including foraging habitat). The Agency states that a more detailed design with cross-sections will be required to address the above issues (note: further detail in relation to this matter has subsequently been provided by the applicant).
- viii. For the above features to provide significant habitat benefits they will need to be planted/sown with appropriate locally native species of UK genetic stock. The management will need to allow for longer grass and vegetation with an infrequent cut such as that used for a traditional hay meadow. The margins of the grassland could be left to become rough and tussocky to benefit newt species and small mammals. The Agency would welcome relevant details from the Food Enterprise Park application in order to assess potential inter-relationships. Reference is made in the report to the current condition of Hencott Pool RAMSAR site and the fact that it is in far from favourable condition. This is used in the report to downgrade the sites sensitivity as a receptor. The sites future potential to be improved should also however be acknowledged within any assessment. The report also makes reference to the increased risk of badger road traffic casualties. Rather than just hoping that casualties are not too high, the Agency states that efforts should be made to identify risk areas based on traffic movements and badger usage, with mammal tunnels placed within 'high risk' locations where practical.
- ix. Groundwater and Contaminated Land: No potentially contaminative previous uses have been identified in a desk study and the likelihood is that the risk is low based on the ES (note: further geotechnical information requested by the Agency has subsequently been provided by the applicant and confirms the above conclusions). The Agency agrees with the recommendation that groundwater monitoring within the boreholes is continued. The Agency notes that it is proposed to install an underground storage tank for the storage of fuels. Whilst the Agency has no objection to the proposed underground storage tank it is essential that all areas to be used for handling of waste are located on an impermeable hardstanding to prevent any contamination entering groundwater.

7.4b) Response of the Environment Agency to the further information: The Agency has no objection to the proposals following receipt of the further information provided by

the applicant subject to the resolution of the point of clarification and the further recommendations referred to below:

- i. Environmental Permitting including Air Quality: The Agency acknowledges the further comments presented but has nothing to add to the earlier comments. Matters such as air quality are addressed as part of this regulatory process. .
- ii. Flood Risk and Surface Water: The supplementary Flood Risk Assessment (FRA) dated September 2009 (Annex J) has addressed the Agency's previous concerns in relation to the recommended 1% plus climate change flood level of 67.819m Above Ordnance Datum (AOD) being utilised as the recognised flood level. The revised details confirm that the proposed built development is within Flood Zone 1 (low probability) and that the floodplain area (< 67.819m AOD) will not be developed or experience ground level changes. However the Agency notes that the Great Crested Newt (GCN) mitigation includes the provision of a pond, the majority of which is sited within the floodplain. In its current location the Agency considers that there is a risk that during flood events the pond would become inundated. This is likely to compromise the purpose of the mitigation pond, through the associated flooding impacts upon the GCN population/habitat based on the effects of 'wash out' and associated water quality/sedimentation that may result. On this basis the Agency recommends that the position of the GCN pond be re-sited (further to the west perhaps) to land outside of the 1% plus climate change floodplain. It should be possible to ensure use of the proposed inflow outfall in a revised location.
- iii. Surface Water quantity: The previous surface water management strategy detailed in Annex E of the draft FRA is acknowledged as promoting best practice in terms surface water quantity control. The detention basin is indicated on Drawing no. Figure 1A, Rev 4, Flood Risk Assessment dated 24.09.09 and has been sized for the peak rainfall event, to accommodate the 100 year event including an allowance of 20% for climate change. The outfall structure to Battlefield Brook will require Flood Defence Consent under the terms of the Water Resources Act or Land Drainage Byelaws.
- iv. Biodiversity (Ecology): The Agency welcomes the proposed GCN pond as detailed within the GCN Mitigation Statement dated October 2009 (Annex H) and has offered some comments above to ensure it is positioned in the best location, in relation to potential flood risk, to ensure its ecological value and purpose are sustained. Notwithstanding the commitment to the inclusion of a GCN mitigation pond, the inclusion of a 10 metre buffer zone is also welcomed for wider ecological benefit. With regard to the detail requested for the detention basin, this information has not been forthcoming. The Agency previously sought a more detailed design with indications of the planting etc to ensure the ecological potential of this feature is realised. It is noted that the overall geometrical shape of the detention basin will remain the same. However, it is recommended that the final design includes the provision of suitable planting etc so that the wider water quality and biodiversity benefits of this detention basin are secured. A condition is recommended requiring submission of a scheme for the management and maintenance of the Battlefield Brook, within the northern boundary of the site and a buffer zone (minimum of 10 metres from bank top) prior to the commencement of development, including measures to protect and enhance biodiversity and

manage vegetation.

- v. Providing some further clarification and certainty is provided by the applicant, the Agency recommends that full details of the detention balancing pond (and similarly the GCN mitigation pond final design features and maintenance) are required through the imposition of a planning condition(s) to ensure that the potential ecological value of these areas are realised and sustained, along with the water quality and water quantity requirements. The scheme shall also include a requirement to manage and maintain the pond features for the lifetime of the development. There is some commitment within the supplementary information to 'management of biodiversity', vegetation and watercourse maintenance. We would expect to see a management plan/statement for the buffer zone (we support the 10 metre buffer), associated biodiversity habitat, vegetation and watercourse. Sections 16.3 and 16.5 confirm that the proposed development 'will have no detrimental impact on the reasons for designation' of Hencott Pool RAMSAR site. The Agency also notes the statement that the development and operation of the proposed development 'will not adversely affect the integrity of Hencott Pool in relation to its conservation objectives'.
- vi. Groundwater and Contaminated Land: The Agency acknowledges the inclusion of the requested ground investigation reports in the further information submitted by the applicant. The Agency are satisfied with the conclusions of the ES in relation to potential ground contamination beneath the site. The Agency agrees that no further ground investigation relating to contamination is required, in this instance. However the Agency recommends that a condition is imposed to secure investigation and remediation of any unsuspected contamination that may be encountered during development.
- vii. Pollution Prevention and Control: With regard to the proposed underground storage tank for the storage of fuels, the Agency notes the reasons for siting the structure below ground. The Agency recommends that the fuel tank is double skinned with interspace leakage protection. The commitment to the 'Environmental Management System' to include consideration of hazards, risks, control measures and responsibility for details such as pollution control is also noted. The Agency are satisfied that the Environmental Permit will ensure pollution control including appropriate use of oil interceptors, design of the waste bunker, underground tank and any facilities for storage of oils, or chemicals.
- viii. Export and Import of wastes at site: Any waste produced as part of the development must be disposed of in accordance with all relevant waste management legislation. The Agency states that where possible the production of waste from the development should be minimised and options for the reuse or recycling of any waste produced should be utilised. Should it be proposed to import waste material to the site for use in the construction of the development (e.g. for the construction of hard-standings, access tracks etc) a Permit, or Exemption may be required.

7.5. Natural England - Based on the new information provided, Natural England has no objection to the proposals with respect to air emissions and their possible impacts on various Ramsar sites. Whilst there will be some residual impacts on a number of

sites, (acid deposition on Hencott Pool in particular was one we looked at), the document from the Environment Agency is clear that all the air emission from the proposal are considered to be insignificant with respect to the conservation objective of the various Ramsar sites. (refer to top of page 57 and generally chapter C 7.3.3). This is based on any contribution of less than 1% being considered insignificant.

7.6 Shropshire Wildlife Trust – No objection. Given the details in the GCN Mitigation Statement the Trust would not object to the proposed development. However given the pressures that may be placed upon the GCN population as a cumulative effect of two developments (i.e. the current application at that for a Food Enterprise Park already permitted) could the long term maintenance of the existing breeding pond be considered?

7.7 Shropshire Badger Group – No response received.

7.8i. Primary Care Trust – No objection. The Health Protection Agency (HPA) has received further information from Shropshire Council with respect to the EWF application. The HPA produced a response on the environmental permit in April 2009. As this response is focused on the potential human health effects, particularly of air emissions, the key information provided was:

- Evidence that abatement systems used in similar Veolia plants meets Emission Limit Values (ELV). This is available on the Veolia website;
- Evidence that monitoring will be robust. Veolia have stated they will meet the continuous and annual monitoring of the Waste Incineration Directive (WID);
- Ground level off site monitoring that will be undertaken by Veolia;
- How future improvements will be implemented, which will be via Environment Agency Improvement Notices; and
- The handing of bottom ash, which will be via completely sealed systems.

ii. Typically, a well-managed and well-regulated EWF presents little risk to local residents. The Health Protection Agency has developed a position statement on municipal solid waste incineration that concludes:

'Modern, well managed incinerators make only a small contribution to local concentrations of air pollutants, It is possible that such small additions could have an impact on health but such effects, if they exist, are likely to be very small and not detectable. The Agency, not least through its role in advising Primary Care Trusts and Local Health Boards, will continue to work with regulators to ensure that incinerators do not contribute significantly to ill health.'

iii. The EWF will be located on Battlefield Enterprise Park in Shrewsbury. The EWF will be fired by predominantly municipal solid waste and will have a design capacity of 90,000 tonnes of waste per annum. The facility will generate up to 8 MW of electricity, with the EWF consuming approximately 1 MW of the generated electricity and the balance is exported to the local electricity network. The EWF will operate continuously, 24 hours per day, 7 days a week. The EWF will consist of a single stream, with a capacity of 12 tonnes of residual municipal waste per hour. The Health Protection Agency recommends that the installation complies in all respects with the relevant requirements of the following domestic and European

legislation:

- Environmental Permitting Regulations 2008
- Waste Incineration (England and Wales) Regulations 2002
- Groundwater regulations 1998 and the European Groundwater directive (80/68/EEC)
- European air quality framework directive (96/62/EC) and daughter directives

iv. Compliance with the legislation listed above, together with good management and regulation should ensure that activities conducted by this installation present a low risk to local human receptors. It is assumed that the Regulator for the site will adequately monitor the installation and, whenever it is reasonably practicable, ensure that any failures in plant or management procedures do not result in the release of substances which could adversely impact on public health.

v. Conclusion The additional information provided does not alter the original response that has been attached as an appendix to this document. Therefore, providing the incinerator is well regulated and managed, the original conclusion still stands that the EWF does not pose a significant risk to health, given what is considered to be an acceptable level of lifetime risk in the UK. The assessment demonstrates that the maximally exposed individual is not subject to a significant carcinogenic risk or non-carcinogenic hazard, arising from exposures via both inhalation and the ingestion of foods.

vi. Local Health issues Based on the application, this installation does not present any obvious cause for concern providing it is well managed and maintained. However, if you are aware of any health issues in this area we recommend you inform the Regulator.

7.9 English Heritage – Following an initially objection English Heritage confirms that it no longer objects to the application for the following reasons:

i. The proposal is for an Integrated Waste Management Plant to be sited within the Battlefield Enterprise Park about 200 metres from a Registered Battlefield (Shrewsbury 1403). Further assessment has been made of visual impact over the longer term, feasibility of reorientation, light dispersion, materials, location, size, capacity of the plant, and traffic flows. As a result English Heritage now has a more thorough understanding of the design and related issues. English Heritage accepts that whilst some aspects will have a lesser visual impact than initially assessed (e.g. translucent cladding), and an enhanced screening scheme will also reduce visual impact, significant changes in design and location are unlikely to be practicable. A Conservation Management Plan (CMP) has been prepared on behalf of Veolia, as applicant, that defines the on-site and off-site works that can be secured by a S106 agreement. The CMP summarises the community benefits offered by Veolia in relation to the management of the Registered Battlefield and associated improvements to public access and interpretation. The works would be managed by a Steering Group of stakeholders including English Heritage, Veolia and Shropshire Council, who have also agreed to be facilitator and to implement agreed works. The S106 agreement would secure initial funding of £33,000 and £3,000 per annum to 2034 to be held in an Escrow account held by Shropshire Council. A separate integrated educational facility to be funded by Veolia would be provided on-site. An enhanced on-site planting scheme would reduce visual impact

of the proposed plant. An enhanced off-site planting scheme would also provide more effective screening along the Battlefield Link Road. The scheme would reduce the visual impact of industrial and commercial buildings within the Battlefield Enterprise Park upon the Registered Battlefield.

- ii. English Heritage has now assessed integration of conservation with other public interests as set out in English Heritage guidance 'Conservation Principles', paragraphs 149-156, and considered the complex issues in the light of the recently published national policy for the Historic Environment, PPS5 and in particular policy HE.10, which reinforces the need to achieve public benefit as part of place shaping. English Heritage has decided that the further benefits secured will enhance the significance of the Battlefield, and that those benefits, when considered alongside the broader public benefit of achieving sustainable waste management, combine so that on-balance, English Heritage does not object to the application.

7.10 Campaign to Protect Rural England – No response received.

7.11 E-ON - No objection. However, Central Networks has Network within the proposed site. Central Networks CAT Team should therefore be contacted concerning diversions and ground works. There is an electricity substation within close proximity of the development. A substation is a potential source of noise, therefore the developer should adopt measures to ensure that acceptable noise levels are maintained for future residents. Any alteration, building or ground works proposed in the vicinity of our cables that may or may not directly affect our cables, must be notified in detail to Central Networks.

7.12 Severn Trent Water – No comments received.

7.13 Network Rail – No objection on the basis that the levels of dust are controlled and do not cause a nuisance on the nearby railway to affect visibility. No further comments in relation to the additional information.

7.14 Advantage West Midlands - No comments.

7.15 Government Office West Midlands - Has been provided with a copy of the applicant's Environmental Statement and other information. No response other than an acknowledgement has been received to this notification.

7.16 Health and Safety Executive – (HSE safeguarding zone indicated)

7.17 Grinshill Parish Council – The council recognise that the proposed development is at some distance from the parish boundary. Nonetheless councillors have made comments including:

- The possible need to send bottom ash to landfill;
- Reassurance is sought that the waste source is from within Shropshire and does not contain nuclear material;
- The question of air pollution is not clear in relation to health effects and human health risks;
- The site is near an area of commercial development which is growing with an increasing workforce, along with retail outlets which have to be considered;

- The local community group should possibly be more integrated with local councils;
- Who is going to take on the site after the contract for 27 years has elapsed?
- Some councillors support the idea of converting waste material into a useful source of energy, landfill will become increasingly scarce.

7.18 Shropshire Fire and Rescue Service – No representations received during the consultation period. Any representations received before the Committee will be reported to the Committee.

7.19 Defence Estates Safeguarding - The Ministry of Defence has no safeguarding objections to this proposal, however, the height of the development will necessitate that the MOD's aeronautical charts and mapping records are amended. Defence Estates Safeguarding therefore requests that, as a condition of any planning permission granted, the developer must notify this office with the following information prior to development commencing:

- Precise location of development;
- Date of commencement of construction.
- Date of completion of construction.
- The height above ground level of the tallest structure (in this case 65m tower).
- The maximum extension height of any construction equipment.

Internal Consultations:

7.20 Public Protection (Environmental Health) - No objection subject to the following comments:

- i. Operational Noise Prior to submission of the application, the methodology for assessment of the operational noise impact on the area from the installation was discussed by Environmental Health with the applicants' acoustics consultants, Scott Wilson and a criteria of 5dB below the pre-existing background noise level (or 10 dB below in the event that noise emissions contain tonneal characteristics) agreed in respect of sensitive locations (residential) around the application site. It was further agreed that a background noise survey would be carried out by the consultants at three representative sites for the purpose of demonstrating compliance with that criteria and this has been detailed in the supporting documents to the application. Section 5.3 of Appendix D to the application states that the predicted noise levels at residential receptor positions at Harlescott Lane and Battlefield Road based on an amended boundary design level of 53 dB LAeq (incorporating a 5 dB correction factor for tonneality) at the installation assessment boundary, meet the criteria. However the 'corrected' predicted level at Church Cottage to the north of the site, is 37 dB LAeq (32 uncorrected) which is an increase of 4 dB above the lowest measured night-time background level of 33 dBLA90 for that location and accordingly, the view of this Department is that such an increase is of 'marginal significance' when assessed using BS. 4142 in respect of the likelihood of complaints and for that reason is unacceptable. Our view is that an acceptable level would be in the region of 5 dB below the lowest background level, i.e. 28 dB LAeq (23 dB LAeq uncorrected) based on the above criteria. It is our understanding that the installation will operate 24 hours a day and therefore some loss of amenity and the likelihood of complaints may arise at night unless Veolia can operate to a more stringent design level. Some mitigation of night-time noise levels could possibly be achieved by limiting vehicle movements and handling of wastes and other materials to non night-time hours. In the event that the application is approved conditions should be applied in respect of noise limits at

the installation boundary based on achieving acceptable levels at sensitive receptor locations based on the lowest levels of the night-time background LA9015 minute periods

- ii. In addition, it is recommended that a condition is imposed requiring that vehicle movements (including deliveries of domestic refuse, other wastes and recyclable materials and the removal of ash, other wastes and recyclable materials) be restricted to non night-time hours i.e. only between the hours of 0700 and 2300. It is recommended that a traffic management plan detailing access routes for vehicles should be submitted for prior approval of the Local Planning Authority. Given that formal action by Shropshire Council under Section 80 of the Environmental Protection Act 1990 in respect of 'Statutory Nuisance' will be precluded should a Permit be issued for the Installation by the Environment Agency, it is recommended that, if the application is approved a condition is applied requiring that Best Practicable Means to be employed by the operators to minimise noise from the operation of the plant. In addition a condition requiring that a procedure for the handling of noise complaints should be agreed and adopted to ensure any complaints are documented, investigated and that actions taken are recorded and retained for inspection by the Local Planning Authority.
- iii. Construction Noise It is recommended that the following conditions are applied in the event that the application is approved:
  - No construction works shall be carried out on the site, which are audible beyond the site boundary, between 19.00 and 07.30 on weekdays or before 08.00 and after 13.00 hours on Saturdays. On Sundays and Public Holidays no works on site shall be allowed.
  - Noise from construction works shall not exceed 70dBI-eq1 hr at the nearest noise sensitive receptors at all other times
  - No piling shall be carried out without the prior written approval of Shropshire Council
- iv. Odour and Dust Control Notwithstanding any Permit conditions that should be applied by the Environment Agency, it is recommended that if the application is approved conditions are applied requiring that all doors are to be close fitting and kept closed except when access is required, that negative pressure in the reception hall be employed and that ongoing maintenance of plant and equipment be required in order to minimise fugitive emissions of odour and dust. Specific conditions should be applied in respect of the handling and disposal of ash
- v. Air Quality Having reviewed Appendix E2, information and supporting data from ambient air quality monitoring and dispersion modelling has been carried out by the applicant's consultants ERM. This indicates that there should be no adverse implications for the three Air Quality Management Areas (AQMA) declared by the former SABC in respect of predicted exceedences of the annual mean Air Quality Objective for Nitrogen Dioxide. In particular the Heathgates AQMA located within 2 kms of the proposed installation and the Shrewsbury town centre AQMA located within 4 kms. However, it appears that pages E2/57 and E2/58 relating to part of the discussion on Sulphur Dioxide are absent from the documents. At the time of responding to the Scoping Report, it was requested that reporting also include reference to 15 minutes mean concentrations in order to ensure complete assessment with reference to all the UK Air Quality Objectives. The above missing

pages may of course include this data. I draw your attention to the comments of the Health Protection Agency in their letter dated 21 April. It is recommended that, if you have not already done so, the Environment Agency be consulted on this matter.

7.21 Central Area Development Management -

7.22i. Highways Development Control - The site which is located within the Battlefield Enterprise Park currently operates as a modern Household Recycling Centre (HRC) and Waste Transfer Station (WTS) which was brought into use in 2004. The Battlefield Enterprise site is located on the northern outskirts of Shrewsbury which can be accessed via Harlescott Lane, Ellesmere Road, Battlefield Way and the Battlefield Link Road. The roads within the Enterprise Park are designed to industrial estate road standards with footways and cycleways. Whilst the HRC is accessed via all these routes, dependent upon where customers live or work, the principal access for HGV's connected with the WTS are routed via the Battlefield Link Road. This was a requirement placed on the site use when it was opened in 2004. There are however some local refuse collections which gravitate to the site from the town direction, however these are limited in number. The issue of HGV movements was a local concern raised as part of the development of the present waste transfer use and has again been raised in connection with the current proposals. The Battlefield Link Road is of strategic importance to the site activity and particularly the routing of HGV's as it links to Battlefield Roundabout and thereafter to the A53, A49, A5 and M54. The site therefore has good access to the primary road network and is well located to cater for the level of HGV traffic generated by the collection and delivery of waste.

ii. The current proposal introduces an Energy from Waste Facility (EFW) within the site as part of the strategy of dealing with waste in Shropshire. In addition the scheme includes the extension to the existing HRC facility. Whilst therefore the current proposal will result in changes to the way in which waste is dealt with and particularly in regard to waste that would otherwise have been sent directly to landfill, the applicant company have submitted a Transport Assessment (TA) which indicates that any increase in HGV movements on the highway network would not be material. Overall the TA concludes that the new waste facility will not result in any adverse highway capacity or road safety impacts. The TA further suggests that there may be the potential to reduce HGV movements by the operator introducing a system of backloading. It is understood that the operator is willing to explore this possibility as it would be beneficial in terms of both costs and sustainability.

iii. Having considered the TA in some detail, together with the further information submitted by the applicant company's agent as part of the Regulation 19 Response, the highway authority is satisfied that the site can be served principally from the strategic road network. The highway authority is satisfied also that the TA provides a robust assessment of the likely HGV movements that will be generated as part of the new waste facility. Subject therefore to the predominant routing of all HGV's to and from the site via the Battlefield Link Road the highway authority has no fundamental objection to the proposed development. It is considered however that the routing of HGV movements should be formalised by way of a planning condition or associated legal agreement. It is understood that the applicant company are content with this requirement. Notwithstanding the above it is

recognised that some local waste collections will continue to access the site from the town centre direction. The highway authority is satisfied however that this can be controlled as part of the permission or associated legal agreement.

- iv. In relation to the HRC, the current proposal will increase the number of recycle bays but it is not anticipated that there will be an increase in the throughput of the facility, as it will serve the same population. It is not anticipated therefore that there will be a material increase in vehicle numbers as compared to the existing HRC use. It is further suggested that the increase in the number of recycle bays will in fact reduce waiting times and therefore queuing by the public to access the facility. The current stacking length within the site for public vehicles waiting to use the site has operated satisfactorily along with suitable management arrangements since the site was opened. It is noted also that the increase in the number of recycle bays does give the operator some flexibility in terms of the allocation of those bays for waste types and particularly during the periods when green waste is high during periods of the year. Overall it is considered that there are no fundamental issues with regard to the proposed changes to HRC element of the site.
- v. The proposal will result in some significant changes to the access to the site and particularly in relation to the Energy from Waste Facility part of the development which will principally be accessed by HGV's. A new access road is to be taken from the roundabout on Vanguard Way to serve the site. The new access road will provide better separation between HGV and public access to the site. This access road will also serve the development land to the north owned by Morris Property. Negotiations have taken place between the applicant and Morris Property together with the highway authority to achieve a design which suits both parties and meets adoption standards. This is not considered to be a fundamental issue and the highway authority is content that the imposition of a negatively worded planning condition linked to suitable management arrangements will provide the necessary planning control.
- vi. As part of the proposal is considered that a Green Travel Plan should be a requirement of any planning permission in order to promote sustainable travel for the employees of the site. A condition therefore should be imposed to cover this matter. As a further development of green principles it is understood that the applicant company will examine alternative fuels used by its fleet of vehicles as part of an overall Transport Plan.
- vii. In summary the highway authority are satisfied that the proposed development will not give rise to conditions detrimental to highway capacity or safety. The highway authority therefore raises no objection to the granting of consent subject to the imposition of conditions relating to access, site layout, HGV routing and a Travel Plan. Some of these matters will need to form part of an associated legal agreement.

7.23 Policy: The following comments are made: –

i. EU Framework Directive on Waste

Member States are required to bring into force by 12 December 2010 the laws, regulations and administrative provisions necessary to comply with the revised Waste Framework Directive (WFD). Defra is currently consulting on proposals for transposing the revised WFD in England. Even if the UK exercises its derogation

ability, then the revised Directive will take effect during the lifetime of the proposed plant. Specific elements of the revised Directive which may be relevant to the proposed development include:

- Article 4: Waste Hierarchy: As with the existing waste hierarchy, recycling is of a higher priority order than energy recovery as a waste recovery operation. Under the revised WFD's waste hierarchy, energy recovery as a waste recovery operation is of a higher priority order than disposal. However, it is the view of Defra that (a) energy recovery as either (a(i)) a waste recovery operation or (a(ii)) a waste disposal operation should be of a higher priority order than either (b) disposal by incineration without energy recovery or (c) disposal by landfilling. This is because, even in a disposal operation, the recovery of energy is to be encouraged to help reduce, for example, the overall use of fossil fuels. Landfilling is at the bottom of the hierarchy for a range of reasons — including the fact that it is a lost opportunity to secure value from waste,
- Energy Recovery. It is possible for the recovery of energy to take place in either an operation that is classified as a waste recovery operation or one that is classified as a waste disposal operation. The revised Directive draws a distinction between "R1 Use principally as a fuel or other means to generate energy"(a recovery operation) and "D10 Incineration on land" (a disposal operation). The revised WFD contains an extended definition of recovery. Article 3(15) provides that 'recovery' means any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. It is unclear whether application of the RI formula would result in the proposed facility being classed as a 'recovery' or as a 'disposal' operation and clarification should be sought from the applicant on this issue.

ii. National Planning Policy Guidance (PPS10)

PPS10 identifies a number of waste planning principles relevant to waste management development of the type proposed:

- We must protect human health and the environment by producing less waste and by using it as a resource wherever possible;
- We must move the management of waste up the 'waste hierarchy' of reduction, re-use, recycling and composting, using waste as a source of energy, and only disposing as a last resort;
- We must encourage communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet the communities' needs;
- We must help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations;
- Applicants should be able to demonstrate that the envisaged facility will not undermine the waste planning strategy through prejudicing movement up the waste hierarchy.

iii. Regional Spatial Strategy (Draft Phase 2 Revision)

The adopted Regional Spatial Strategy (RSS) identifies a target of 155,000 tonnes per year of municipal waste recovery capacity for Shropshire and Telford & Wrekin

by 2021 and key criteria for the location of waste management facilities;

iv. The Draft Phase 2 Revision to RSS includes updated targets and key guidance, including:

- We must make provision to manage an equivalent quantity of waste to that (of all kinds) which is generated in Shropshire;
- Waste facilities of regional or sub-regional significance should be located within or in close proximity to Shrewsbury;
- The RSS Phase 2 Revision document identifies a draft target for 2025/6 of 217,000 tonnes per year of capacity to divert municipal waste away from landfill;
- There is a gap of 150,000 tonnes/year between the capacity already available at existing waste management facilities and that which will be required by draft regional targets for 2025;

Note: The following comments are made by Planning Policy in the context of the announcement by the Secretary of State on 6<sup>th</sup> July 2010 providing confirmation of the intention to abolish Regional Spatial Strategies:

With respect to waste forecasts, the RSS housing figures for Shropshire are largely consistent with those which Shropshire Council has prepared and so better reflect local household growth than in some other parts of the region. Whilst the status of the waste targets in RSS is not yet clear, these targets reflect the best available data on waste management requirements in Shropshire. Accordingly there is confidence that the targets will continue to have relevance in the context of the Battlefield EWF application.

v. Waste Local Plan

The adopted Shropshire Waste Local Plan identifies a clear vision for the future of waste management in the County. The Plan seeks to:

- encourage consideration of waste as a potential resource;
- maximise local opportunities to re-use, recycle and recover value from waste;
- attract innovative businesses to reprocess recyclable materials to bring benefit to the community through local economic growth and employment;
- minimise adverse impacts which can result from the handling, processing, transport and disposal of waste.

vi. Site Identification

This site is identified in Policy 6 of the Adopted Waste Local Plan as being suitable 'in principle' for an 'Integrated municipal waste management site including recycling, in-vessel composting and small scale energy recovery, excluding mass burn incineration.' The site was assessed for inclusion in the Plan using the methodology described in the Waste Local Plan Technical Appendix 2: Annex C.

vii. At the time that the Waste Local Plan was being prepared (2001 - 2004), the Shropshire Municipal Waste Management Strategy (SWMS) had only recently been completed. The view from the Shropshire Waste Partnership at that time was that conventional incineration would not be an appropriate technology for Shropshire because the large scale of such plants (120,000 tonnes +) would undermine recycling performance. At the same time, other, potentially more

efficient, Advanced Thermal Treatment (ATT) technologies appeared to be becoming available at a scale more appropriate to the Shropshire context. Since 2001-4 there have been pilot projects of other technologies. However, in the current context, these alternatives remain sufficiently unproven to provide a cost effective alternative to conventional technology for what is essentially a performance contract.

viii. These factors influenced the choice of sites and the description of their potential uses in the Waste Local Plan. The validity of this approach was recognised by the Planning Inspector in his assessment of the Plan. There are a number of key points to make about the current wording now included in the Plan:

- The Plan is intended to be site, but not process specific as recognised by the Inspector;
- Schedule 1 and the site profiles only describe potential uses for the sites identified under Policy 6;
- There is an inherent acceptance that flexibility is required to provide for the industry to respond in the most appropriate way at the time of any planning application.

ix. The site is described in a 'Site Profile' in Appendix 1 of the Plan which identifies the following environmental constraints:

- Major aquifer and SPZ III;
- Battlefield brook on northern boundary. Indicative floodplain abuts northern portion of the site.

x. The Site Profile identifies the following key issues from the site assessment process:

- Well located with respect to Shrewsbury;
- Allocated employment land;
- Well located with respect to the strategic highway network;
- Acceptable highway access can be achieved;
- Would deliver co-location benefits, including the use of heat and power by neighbouring land uses;
- Size of site will influence scale of recycling activity;
- Potential for future rail access using adjacent proposed rail freight facility (no longer relevant as rail facility is no longer proposed).

xi. The Site Profile identifies the following development requirements for the site: The Environment Agency require that:

- The Battlefield Brook is protected from any contamination from the site, including any airborne contamination to the existing balancing pool;
- A risk assessment must be carried out that takes into account flood risk and drainage issues, especially the Battlefield Brook. Flood storage compensation measures may be required;
- Any facility must be sited on an impermeable base;
- There must be no interruption to the surface water and the drainage system of the surrounding land. Surface water runoff control measures may be required;

- There must be a replacement of any vegetation lost, and any landscaping work to be with native species only. Sustainable Drainage systems may also contribute towards this enhancement;
- Further work is required to assess highway capacity and access issues in the context of other development on neighbouring land.

xii. Other Relevant Waste Local Plan Policies include:

- Policy 4: Protecting Shropshire's Environment and Communities
- Policy 10: Co-Location
- Policy 17: Energy Recovery Facilities
- Policy 25: Development Control Considerations

xiii. Draft Shropshire Core Strategy (Policy Directions) August 2009: The 'Policy Directions' draft Core Strategy proposes the following Policy Direction:

- Commit to facilitating the provision of sufficient capacity to manage an equivalent quantity of waste to that generated in Shropshire;
- Support the provision of additional commercial waste management services and infrastructure to help reduce the burden of waste costs on the local economy;
- Commit to delivering the regional waste apportionment targets set out in the RSS partial review;
- Identify a spatial pattern (broad locations) for future waste facilities based on a combination of existing and new locations which are accessible and close to the main urban areas;
- Wherever practicable co-locate and integrate new waste facilities or space in the design of new development.

Note Section 9.16 of this report provides an update on the Core Strategy

xiv. Summary Comments from the Council's policy team indicate that the proposed energy recovery facility would deliver additional waste management capacity as part of an integrated solution to the long term management of Shropshire's municipal waste. The Waste Local Plan envisages that the Battlefield site is suitable in principle for this purpose, but excludes 'mass burn incineration' from the list of potential uses. However, the Plan is not intended to provide definitive guidance on appropriate technologies, recognising that these may change over the lifetime of the Plan. Indeed, it would appear that assumptions about the availability of viable alternative technologies made at the time that the Plan was prepared have not been validated in practice. The approach taken to this issue in the Plan was specifically recognised by the Planning Inspector in his report of its examination (see Inspector's report paras: 2.117; 2.119; 2.343; & 2,346). The proposed facility would help to divert significant quantities of municipal waste away from landfill in a way consistent with the requirements of European and national policy guidance and regional targets. The proposed facility would respond to national regional policy by allowing Shropshire to take more responsibility for its own waste and move towards greater self-sufficiency. Capturing the energy value of residual municipal waste would significantly reduce any continuing burden on communities in adjacent areas such as Telford, where significant quantities of residual municipal waste is currently landfilled. From a strategic policy perspective,

in general terms the principle of the development of an energy recovery facility at Battlefield is consistent with the objectives of national and regional policy and those of the Waste Local Plan and developing Core Strategy and is therefore supported. However, the acceptability of the proposed facility in this location will be subject to a detailed assessment of the extent to which potential adverse environmental and transport impacts can be adequately controlled, including those issues raised in the site profile in Appendix 1 of the Waste Local Plan.

Natural Environment Group:

7.24a) Ecology (response to the application as submitted):

- i. The applicant's consultant Scott Wilson carried out a Habitat Regulation Assessment on the effects of the Energy from Waste Facility on any European Designated Sites within 10km of the site. Scott Wilson concentrated on the interest features identified in the Midland Meres & Mosses Ramsar designations which do not give specific reasons for designation for each component part of the Ramsar designation. A recent paper from Natural England called 'Information on Nature 2000 Sites in the West Midlands' contains a breakdown of which component SSSI contains which features from the Ramsar designation. In this paper Natural England state that 'Conservation objectives are not set specifically for Ramsar sites but there are favourable condition tables for the component SSSIs'. In the Natural England paper Hencott Pool is identified as Carr habitat containing the Ramsar designated species cowbane (*Cicuta virosa*) and elongated sedge (*Carex elongata*). It is against these reasons for designation that the Habitats Regulation Assessment for Hencott Pool should be carried out. It should also be noted that there are the following specific reasons for designation given for:
  1. Fenemere (Midland Meres & Mosses Phase 1) - Designated for open water, swamp, fen and Ramsar species *Cicuta virosa* and *Thelypteris palustris*
  2. Bomere, Shomere & Bettonne Pools (Midland Meres & Mosses Phase 1) - Designated for open water, swamp, basin mire, carr and Ramsar species *Elatine hexandra* and *Thelypteris palustris*
  3. Berringtonne Pool (Midland Meres & Mosses Phase 1) - Designated for open water, swamp and fen
- ii. The Habitat Regulation Assessment carried out by Scott Wilson considers these sites based on the whole Ramsar citation and not the specific habitats for component sites identified in the above Natural England document. It will be necessary to reconsider some aspects of step 1, screening, of the Habitat Regulation Assessment to ensure that these sites were correctly assessed and correctly excluded from step 2, Appropriate Assessment. Further discussions between the developer, Natural England and the Local Planning Authority may be necessary to establish that the Habitat Regulation Assessment has been carried out appropriately.
- iii. Bats No significant trees are identified for removal as part of the proposed development. It should be noted that if the current plan alters and work on the pedunculate oak on the northern bank of Battlefield Brook becomes necessary then emergence bat survey of this tree would be necessary since it has been identified as a potential bat roost site. The Environmental Statement states that 'prior to the commissioning of the development a detailed lighting scheme will be

submitted for the approval of the LPA'. The lighting scheme must be appropriate to cause no negative effects for bats foraging in the area.

- iv. Great Crested Newts The Great Crested Newt Survey showed that there is a small to medium population in the pond 170m to the north of the site. Great Crested Newt will need to be excluded from the development site and any material storage areas before the construction phase begins. Scott Wilson state that a full mitigation package needs to be developed and will depend, to some extent, on the mitigation package agreed for the Food Enterprise Centre on the adjacent site. Full details of the exclusion zone, the exclusion methodology and the exclusion period will need to be agreed as appropriate by Natural England and the Local Planning Authority. Scott Wilson identified September and October 2009 as the exclusion trapping period. Details of the newt mitigation and a justification for the methodology would have to be submitted to the Local Planning Authority before a planning decision can be made. Scott Wilson acknowledged that it will be necessary to compensate for the loss of 1.7ha of intermediate terrestrial habitat. The exact location for this compensatory habitat will need to be proposed and agreed by Natural England and the Local Planning Authority before a planning decision can be made. It is best practice for the compensatory habitat to be present before any change to the existing habitat takes place.
- v. Water Vole The June 2008 Water Vole survey found no individuals but did record the presence of a number of old burrows. The survey does not acknowledge that there is a 2007 record of 1 Water Vole very close to the site. There are two concerns in terms of disturbance to Water Vole which are a UK Protected Species:
  - 1. Direct disturbance of Water Vole in the brook very close to the site. It is not very likely that there are Water Voles close to the site, since the 2008 survey was negative, but any possibility of direct disturbance to Water Vole in this area can be minimised by imposing a 10 metre buffer zone along both banks of the brook where excavations, vehicular access and material storage are forbidden.
  - 2. Indirect disturbance and negative impact on Water Vole using the brook downstream of the development could occur through run off of dirt, dust, sediment, chemicals or petrol into the brook. The developer should produce a method statement outlining how run off of any chemical or particulate matter into the brook will be prevented during the construction phase and throughout the lifespan of the facility. Agreement to the 10 metre buffer strip and an appropriate method statement would have to be submitted to the Local Planning Authority.
- vi. Badgers There is a Badger sett on site which was active in April 2008 but not obviously active in June 2008. This was originally classified as a main sett and although activity has declined since the original survey it should be treated as an active sett until proven otherwise. Given that there is an active Badger sett on the site it will be necessary to monitor the sett. The sett should have been monitored in spring 2009 and should be monitored again in autumn 2009 to establish whether the sett is currently active or not. Any work around the Badger sett should then only be carried out under the appropriate license from Natural England.
- vii. Wild Birds Clearance of any vegetation on the site should occur outside of the nesting season. That is acceptable but would be a source of conflict with clearing

the site for reptiles which is detailed below.

- viii. Reptiles It is proposed to trim the site vegetation in the presence of ecologists during the active season for reptiles which is between April and October. There is a conflict between the suggested mitigation works for birds and reptiles. The only way to carry out the reptile mitigation without risk to nesting birds is to do all clearance of vegetation and strimming in September which is outside the bird nesting season but still inside the active period for reptiles provided that the weather stays reasonably warm. If any patches of higher standing vegetation such as brambles are going to be strimmed they should be hand searched for bird nests immediately prior to removal. If any active nests are discovered the vegetation must be left undisturbed until the nest is empty. (note: the applicant has subsequently submitted a precautionary method of working in respect of breeding birds and reptiles)
- ix. In summary the following are required by the Local Planning Authority before a planning decision can be made on the above application:
1. Habitat Regulation Assessment which considers the four Ramsar designated sites identified by Scott Wilson against the specific habitats and species for which they were designated. The specific criteria for designation for each component of the Ramsar can be found in the Natural England document 'Information on Natura 2000 Sites in the West Midlands'.
  2. A detailed lighting schedule for the proposed facility
  3. Full details of the Great Crested Newt mitigation proposed by Scott Wilson and justification for the methodology adopted
  4. Full details including location of the 1.7ha of compensatory habitat for Great Crested Newt proposed by Scott Wilson
  5. Agreement of a 10 metre buffer zone along the banks of the brook to limit possible disturbance of Water Vole populations
  6. A method statement outlining how run off of chemicals, petrol, dirt etc will be prevented both during the construction and operation phases of the proposed facility;
  7. Confirmation that the badger monitoring in Spring 2009 was carried out and a summary of its findings
  8. A method statement outlining how wild bird nests and reptiles will be protected during the site clearance work including carrying out strimming in the presence of an ecologist in September to limit conflict between the seasonal requirements of reptiles and birds and agreement to hand search any significant areas of vegetation for birds nests prior to strimming.

*Note: Many of the above issues have been addressed by the subsequent Regulation 19 response from the applicant and associated correspondence / discussions. In particular:*

1. *Subsequent discussions involving SC Ecology, the Environment Agency and Natural England have established that Hencott Pool is the only one of the four identified sites where there is a possibility that relevant thresholds will be exceeded. This issue is discussed further in section 10 of this report;*
2. *It is considered that lighting can be dealt with by an appropriately worded 'prior to commencement' planning condition, as was applied to the previous permission;*

- 3-4. *The applicant has submitted the required GCN mitigation statement;*
5. *The 10m water vole buffer zone has been agreed in principle and can be conditioned;*
6. *Pollution issues are covered by conditions recommended by the Environment Agency;*
7. *An additional badger survey has been provided by the applicant;*
8. *The required method statement has been submitted.*

7.24b) Ecology (updated response dated 24<sup>th</sup> June 2010):

- i. Habitat Regulation Assessment Following discussions with Scott Wilson, Natural England and the Environment Agency, you have already been supplied with the council's Habitat Regulation Assessment under the Conservation of Habitats and Species Regulations 2010 for the above application.
- ii. Other site and species issues. Having looked at the Regulation 19 submissions, enough ecological information has been submitted to allow a planning decision to be made, but there are a number of conditions that would need to be applied if permission is granted.
- iii. Integrated mitigation statement. As requested, the bird and reptile protection measures have been combined in the 'Precautionary Method of Working in Respect of Breeding Birds and Reptiles' (Scott Wilson Draft September 2009). However, the Great Crested Newt Mitigation Statement (Scott Wilson Draft October 2009) has been written without reference to mitigation works for birds and reptiles or badgers. Timings and methods of these works need to be integrated to avoid harm to one species whilst protecting another. However, if planning permission is granted, the applicant will then have to apply to Natural England to obtain an EPS mitigation licence for Great Crested Newts and possibly another licence to disturb badgers. The Wildlife Licensing Section of Natural England may well ask for modifications to the mitigation methods before granting the licences (if they are minded to grant them). In view of the possibility of changes to the mitigation methods post planning permission, it is recommended that a condition is attached for the submission of an integrated mitigation statement, covering all protected species issues, to be submitted to the LPA for prior approval, after necessary licences have been obtained and the construction timings confirmed, but before vegetation clearance or any other ground disturbing works take place. The statement should provide clear plans of the exclusion areas, position of the new pond and habitat areas including the landscaping for visibility purposes. Any disturbing effects of the landscape planting should be kept to a minimum and be addressed in the method statements. Similarly, the steps to be taken to protect the 10m buffer zone to the brook from any trafficking, storage of materials or other disturbance need to be covered. Included in the plans submitted with the Regulation 19 material is a drawing D116327/AI/08, Existing and proposed screen planting location and growth rates', 'A5124 Vegetation survey August 2009'. On this plan, triangles of woodland planting are shown off the development site, immediately south of the A5124, very close to the existing GCN breeding pond. If these are to be planted as part of this application, they would need to be covered by the EPS Mitigation Licence and its method statement, and reference to them or any other landscaping in the vicinity of the breeding pond should be added to the integrated mitigation statement. In the longer term they could add beneficial habitat for newts, particularly if hibernacula are added, but mitigation methods for

planting/construction would be needed to prevent harm to individual newts.

- iv. Bats Surveys indicate that there are no trees or buildings to be removed on the development site which could support bats and only low levels of foraging have been indicated over the construction area. The river corridor, which is a key foraging and commuting feature for bats and other wildlife, is to be protected by a 10m (minimum) buffer. Native species tree and shrub planting is likely to improve the habitat for bats in the longer term. The only trees which could support bat roosts lie immediately outside of the application area, on the northern bank of the brook. These should not be affected by the development, but in case works become necessary for any reason an informative (see below) could be added to the decision notice.
- v. A detailed lighting scheme covering any internal lights that may shed light outside and any external lighting, should be submitted for the approval of the LPA. The scheme must be designed to minimise disturbance to bats foraging in the area. Consideration should be given to:
- Using low pressure sodium lamps or high pressure sodium instead of mercury or halide lamps,
  - directing light downward to where it is needed and light spillage avoided, through design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct light to the intended area only,
  - reducing the height of lighting columns to a minimum, although in some cases taller columns can enable light to be directed downwards at a more acute angle, reducing horizontal spill,
  - light levels should be as low as guidelines allow and should not be used if not needed,
  - lights, at least on the north side of the site, should not remain constantly on overnight,
  - if at all possible, lights should not be erected on the building facing the brook and should be located as far away from the Battlefield Brook corridor as possible.

Informative - All species of bats found in the UK are European Protected Species under the Habitats Directive 1992, the Conservation of Species and Habitats Regulations 2010 and the Wildlife & Countryside Act 1981 (as amended). Trees on the northern bank of Battlefield Brook, outside the application site, have been noted as having bat roost potential. Should the need arise to carry out works on these trees, a bat survey is recommended.

If a bat should be discovered on site at any point during the development then work must halt and Natural England should be contacted for advice. Reason: To protect biodiversity on the site

- vi. Great Crested Newts Under the Conservation of Habitats and Species Regulations 2010, an analysis of the 'favourable conservation status' test has been supplied to you already. This concludes that providing the method statement (as produced by the applicant with any modifications required by the licensing body) is fully implemented, the development should cause no detrimental impact on the favourable conservation status of the maintenance of the GCN population. Furthermore, the habitat creation proposed has the potential to improve conditions

for GCNs.

- vii. Badgers The badger sett on site which was active in April 2008 but not obviously active in June 2008, was monitored again in October 09 and March 10 by Scott Wilson (letter ref. D116327). The sett was found to be active on both these dates. Monitoring should continue up to and during construction. The consultants recommend maintenance of a 20m exclusion zone around the sett and allowing free access along the 10m buffer zone beside the brook. The mitigation in the above letter, informed by future monitoring, should form an element in the conditioned integrated mitigation statement.
  - viii. Management Plan In order to ensure the short, medium and longer term success of the mitigation and landscaping works, submission of a landscape and biodiversity management plan should be conditioned, providing guidance and a programme of works to maintain the habitats, including the new pond. The plan should be reviewed annually and any changes required should be notified to the LPA for approval. Confirmation should also be provided of the agreement to maintain a 10 metre buffer zone along the banks of the brook to limit possible disturbance of Water Vole populations
- 7.25 Landscape officer: - With regard to the visual impact analysis there is a tendency to under estimate the sensitivity of the receptors. It would probably be expected that the receptors visiting the Battlefield viewing mound (View Point 1) would be assessed as high rather than medium as the landscape is generally the focus of their attention. It is also considered that users of Albright Hussey and the nearby footpath (Viewpoint 3) to also be of High sensitivity given the purpose of use is mainly recreational and leisure including walking. There may be a tendency to over state the likely mitigation effects of the proposed on - site tree planting together with the estimated effects of various off site screen planting such as along the Battlefield Link Road. The viewpoint assessment indicates that the magnitude of effects after 15 years is reduced from Medium to Very low at the Battlefield viewing mound (Viewpoint 1), from medium to Low at Albright Hussey (VP3), from Medium to Low at Battlefield Church ( VP8) and from Medium to Low at the Battlefield Farm and Visitor Centre(VP17). This will be dependant on the establishment and growth of the proposed on -site planting and the growth and management of the screen planting along the Battlefield Link road and other off site locations. These together could alter the overall significance of effects (Refer Table F8.1) in some instances e.g. to moderately significant effects after 15yrs at Battlefield Viewing Mound (VP1) and at Albright Hussey(VP2) with Substantial effects remaining after 15yrs at Battlefield Church (VP8) and Battlefield Farm Visitor Centre(VP17). Given the size and bulk of the proposed building it may be worth considering some additional off site tree planting at agreed locations particularly to the north, subject to agreement with English Heritage in relation to the Battlefield heritage site.
- 7.26 Archaeology – No objections in principle. There is a need to liaise with English Heritage in relation to the EWF proposals.
- 7.27 Local Members – Local Members were informed of the proposals when the application was submitted.
- 7.28 MEMBERS' SITE VISITS

- i. Members visited an existing EWF facility operated by the applicant at Chineham in Hampshire on 12<sup>th</sup> July 2010.
- ii. A Member's visit to the application site and its environs, including the Battlefield 1403 Visitor Centre has been scheduled for the morning of the committee on 26<sup>th</sup> July 2010.

## **8.0 PUBLICITY AND REPRESENTATIONS**

8.1 The application has also been advertised by notices at the site and in the Shropshire Star newspaper. The Battlefield site is identified as a preferred site in the Waste Local Plan. However, given the exclusion of mass burn incineration from the list of potential uses for the site identified in the Site Profile included in the Plan it was considered expedient to advertise the proposals as a departure from the Plan.

8.2 Notification letters were delivered to 1200 residential and commercial properties (972 residential, 228 business) in the area around the site. In addition, the proposals were the subject of community "consultation" by the applicant in a wide radius around the site, both prior to and following submission of the application, including the circulation of leaflets to properties in North Shrewsbury. The applicant also established a pre-application community liaison group. At the date of finalising this report 447 objections have been received, 250 of which were submitted on standardised postcards provided by Friends of the Earth. Three representations in support of the proposals were also received. The representations received can be grouped into the following categories:

- Waste policy / management concerns (approx 43% of all concerns expressed)
- Health and pollution (approx 29% of all concerns expressed)
- Environmental concerns (approx 12.5% of all concerns expressed)
- Locational concerns (approx 6.5% of all concerns expressed)
- Technical concerns (approx 5.5% of all concerns expressed)
- Other (devaluation, tourism, general) (approx 3.3% of all concerns expressed)
- General support (approx.2% of all concerns expressed)

8.3 The representations can be summarised as follows. The percentages refer to the number of letters received which refer to a given issue:

1) Waste policy / management concerns

- 1i). Don't burn rubbish, recycle it. Should recycle / reuse more / package less / produce less waste before 'giving in to burning'; A backward step. Burning destroys valuable useable resources in conflict with the waste hierarchy. Once burnt it can never be recovered; a crime against the future; incompatible with recycling; applicant should recycle plastic; most of our rubbish is now plastic. Recycling saves energy. Priority must be given to recycling. Recycling is better for the atmosphere. The current recycling target is too low. Only if landfilling increases should incineration be considered. Council should show leadership in discouraging waste. Recyclable materials will regain their value as the economy improves, making recycling more viable. There's very little that can't be recycled. Our world has limited resources - lets not send them up

in smoke. An incinerator requires large amounts of waste to be economically viable, so time and money spent on recycling will be wasted. Why take risks when we can manage by recycling more? I think the Household Recycling Centre it is of benefit to the town, but I am against the proposed Energy from waste Facility I appreciate that we cannot continue to use landfill but this incinerator is not the answer for Shropshire or any other location.

- 1ii) Will discourage efforts to recycle – both for public and VES; Incineration promotes the wrong message that it doesn't matter if we throw stuff away – it'll just get burnt; Will therefore lead to the unnecessary using up of valuable resources, instead of encouraging the creative reuse of existing materials. Return to throw away culture. Encourages wastefulness and undermines recycling policy. Studies in other countries show that incineration and high recycling figures are incompatible. Recycling involves time and energy - I'm happy to do this where there are environment benefits but would perhaps not bother if faced with the idea that "its all going to be burned anyway" and I'm afraid others wouldn't either. The problem of households taking recycling seriously if the application succeeds should not be underestimated. We may as well all give up on recycling if this goes ahead. Will encourage waste generation because of the need to operate 24/7. It will make the Ludlow biodigester redundant.
- 1iii) Better / cheaper / safer / more efficient alternatives exist more consistent with the waste hierarchy (AD, reducing packaging, extend kerbside scheme). These tested and emerging technologies would be more flexible and could be expanded or halted for periods without penalty or dangerous emissions. There are alternative processes such as Plasma Gasification that are scientifically proven to be more thorough in consuming all the waste and producing little or no toxic by-products. Several smaller facilities could be built around the county in accordance with the proximity principle. VES has glossed these alternatives over. A kerbside type system could be set up to avoid need to incinerate commercial waste. Present levels of recycling and waste reduction in Shropshire combined with increasing development of modern composting technology mean that reducing landfill targets can be met without incinerators. A zero waste policy can reduce waste to same level as incineration without harmful emissions. This can only be done through education and better practises on the part of industry as a whole. Prior to alternate week collections recycling rates were around 28%. Now they are in excess of 40% and still rising. Incinerator could become obsolete in lead-in time before it becomes operational. MBT is 17% cheaper per tonne. Burning is an easy way out, not a real long-term solution. The money would be better spent on more effective recycling. Even landfill is better than burning! Should extension of existing landfills be required (with better pre-sorting) then maybe this is what we should do in the short term. We dont need an incinerator but we do need a forward thinking, innovative council who can think outside the box when it comes to waste management. There is an opportunity to seek progressive ideas not accept the status quo. Shropshire should be a forward-looking local authority, not seen as stuck in the dirty and dangerous past of waste management. It locks us into waste disposal not recycling. An incinerator should be seen as a last resort, Shropshire is not yet at last resort stage. If we did even half the schemes other Councils offer, we could avoid all this rubbish in the first place and we would not need it. Technology advances quickly and

new, less costly, more advantageous methods of waste sorting are being tried and tested all the time. In just a few years, with new technologies emerging, the way we dispose of our waste will have changed beyond recognition. No incinerators have been constructed in the USA since 1995 and local authority recycling exceeds 70% with the target for zero waste by 2020.

- 1iv) Its unnecessary / not essential to waste strategy / need unproven waste figures reducing as we recycle – Shropshire meets government targets. Excellent recycling facilities; economic slowdown means less waste. We've managed without it so far. Supermarkets are developing their own waste plants. The amount of waste to landfill is falling at around 20% per year at the moment. The council already does not have the full 90,000 tonnes of MSW that needs disposing of each year: In the future, packaging will become less, and with suitable guidance, re-cycling will dramatically increase. What is the incinerator going to burn then?
- 1v) Importation of waste from other areas / sources needed to make incinerator viable. There is insufficient municipal waste in Shropshire. Concern is expressed about waste types. Commercial / industrial waste is more likely to contain noxious substances. Waste would be moved around which is damaging to the environment and does not meet the criteria of dealing with waste locally. Don't need waste from outlying districts disposed of near such a populated area. We are not a dumping ground
- 1vi) Departure from Waste Local Plan which excludes mass burn. Inspector effectively ruled this out at WLP Inquiry. Conflicts with statements made for Battlefield Phase 1 application; public were not consulted on this change.
- 1vii) Procedural concerns. There has been a conflict of interest and insufficient council scrutiny on the contract and / or the application. Democratic deficit / cost to taxpayer of lawsuits. Councillors should have been better briefed. The Council should not have accepted this contract without fully understanding it. The consultation process has been flawed. There has not been a full and proper public debate. No public consultation was undertaken before the Council signed contract with Veolia. Whose decision was it to try and override the Shrewsbury Waste Local Plan, which precludes mass burn incineration at Battlefield? The public should have a vote. Petitions are being ignored. SC should buy out of contract. SC's ability to judge this objectively is compromised by the relationship with the applicant. The proposal is misleadingly referred to as "energy from waste facility" but it's a mass burn incinerator with minimal power generation. The application is too technical for SC to assess without proper environmental expertise - needs an independent expert to be fairly judged. Food enterprise centre is not shown in planning application.
- 1viii) Cost to the taxpayer. Long-term commitment, uneconomic, hidden costs, potential lawsuits. Not cost efficient. Waste of public money. Money better spent helping the environment, not ruining it. VES only concerned with profit – selling electricity to National Grid. Concerns that the future costs of such a project could be ultimately borne by the council taxpayer as has happened in other areas such Nottingham and South Wales when projected costs have fallen short of reality. The proposal lacks a detailed economic evaluation. We

pay enough in council tax. We do not want to pay more for an incinerator or project that will not benefit the county. The long-term economic risk of a contract based on an unpredictable future waste stream has not been assessed. Excessive claims of large savings are made without any proper detailed economic assessment and with doubtful assumptions. Applying the £30/tonne figure could lead to £100m of additional costs over a 25 year contract period. All the funding for future waste recycling initiatives would be taken up paying back the massive PFI loan that is needed to pay for the incinerator. No evidence businesses will pay for incineration. In the middle of a deep recession we need to be sure that any money spent is really necessary expenditure. The proposal is only beneficial to the operator, not the residents. Landfill costs will increase if IBA is declared hazardous. It is likely that with ever increasing standards in the future for chimney smoke pollutants that Shropshire Council would be facing substantial liabilities. Concern is expressed about being locked into a long and expensive PFI contract, with outdated technology. An incinerator is not financially efficient due to lower levels of waste than needed for optimal performance. Veolia's contract comes to an end after 27 years but the life of the incinerator is 35 years, therefore the Council will have to foot the bill for it in the most expensive maintenance period and also for decommissioning. What compensation is being planned for the large number of people who will be affected by the proposed plant? Landfill penalties relate only to biodegradable municipal waste, not other wastes and penalties are only applied to landfill in excess of LATS targets. It is unlikely that any fines would in reality be paid.

- 1ix) Questioning applicants track record / suitability. Lack of information to public. Veolia was recently fined for pollution breaches at its waste site in Liverpool. A recycling warehouse also burnt down in Birmingham in 2008.
  
- 1x) Other waste policy / management concerns  
Lack of cooperation between Telford & Shropshire; coherent waste plan needed for Shropshire geographic area. Little thought given to regional view to avoid duplication; Employment Alternatives would employ significantly more local labour; Will not eliminate need for landfill. Could encourage landfill. Recycling is being rationed to get more combustible material in rubbish bins to feed the incinerator.
  
- 2) Health and pollution
  - 2i) Health concerns Air quality / not proven that there is not a health risk even with safeguards – unpredictable outcomes – remember what was said about DDT and asbestos. Applicant has not proved no health impact / near residential area / schools / food enterprise park. Respiratory illness, asthma, allergies. Long-term effects. Microparticles. Vulnerable young; Doubts about emission control. Burden and costs to the NHS. Precautionary principle must be adopted. Perception - will commit us to 27 years of health fears. Contaminated materials that occur in waste streams which, if burnt the toxins would go into air the residents breathe. Dioxin emissions can contaminate foodstuffs. Don't trust government or council to give honest health assessment. How can the claim that the effect on air quality will be minimal be true when the most dangerous nano particles, furans, dioxins and other free radicals are not properly filtered or measured? Yesterdays practices may be

banned tomorrow because research has proven them to be detrimental to our health. Other countries have banned incinerators for fear of resulting health problems and consequent litigation (e.g. north France, US). Health effects are subtle but are not good. Application should be refused until a thorough review of the health implications has been conducted by independent scientists. Do we really want this health hazard in a densely populated area of Shrewsbury? Keep Shrewsbury safe and clean.

- 2ii) Pollution / air emissions. Already air quality problems in the area. Downwind problems. Baschurch in line of fall out. We need to clean up the air not add to pollution. 'I've lived near one before and a lot of 'nasties' used to settle on my washing'. Unpleasant fumes. Harlescott is a smokeless zone, incinerators emit smoke. Traffic at Heathgates island is another pollution source. Incinerators emit smoke and therefore the structure should not be constructed near a high densely populated area. Although systems such as this currently meet emission standards for their purpose, they are not good for our environment. Commercial waste would produce more toxins. Compliance with European Waste Incineration Directives cannot be assured during all times of operation. No matter what promises are made, accidents do happen. Incinerator will deteriorate over life span. Infringement of civil liberties.
- 2iii) Greenhouse gas emissions / carbon footprint / climate change. Shropshire has poor track record in reducing emissions; Twice the CO2 emitted per unit of power than fossil fuel. Conflicts with national climate change strategy. Government has made a commitment to cut carbon emissions by 34% by 2020 but an incinerator would add to carbon emissions. Not compatible with a sustainable future. A greater climate change impact than recycling and waste reduction. Producing replacement plastics from scratch instead of recycling existing plastics will also add to carbon emissions. Transport of waste will double the carbon footprint. Veolia states the incinerator can be modified to meet more stringent emission standards – so why not now?
- 2iv) Ash - associated health risks from removal and disposal (1 tonne per 3-4 tonnes burnt). The status of IBA is under review and IBA may be classed as hazardous, with serious consequences for IBA disposal; Fly ash is highly toxic. Incineration will produce more hazardous substances by weight than the original MSW input. Ash would require landfilling. Ash can blow from landfill sites. No confidence in landfill monitoring system. Transport of hazardous waste / through a residential area. Methods of disposing of ash residues have the potential to be detrimental to the environment and human health.
- 2v) Water pollution risk
- 3) Environmental concerns
- 3i) Eyesore / in an historic area Twice the height of existing building). High chimney. Effect on surrounding countryside - modern monster against the backdrop of an old Church and battle site. Visually intrusive. Misleading photomontages, contrast with photos of incinerators built elsewhere by VES; Viewpoints from the Albright Hussey are taken from lower elevation than actual viewpoints from windows - recycling centre is not visible on photomontage but is visible from actual viewpoints. Visible plume up to 210m

in length (average 36m) will add considerably to visual impact; Other views should have been included (e.g. B&Q, Tesco, Harlescott Park & Ride).

- 3ii) Highway / HGV concerns incl. noise / vehicle emissions, congestion, increased road maintenance, road safety; continuous operation; countywide transportation is polluting. HGVs may not be allowed to backfill loads. Traffic in surrounding area is heavy. New / planned development in the surrounding area including B&Q will add to congestion. Following other recent developments within the area over the last few years we have definitely noticed a vast increase in the traffic on / along Harlescott Lane and the surrounding area.
- 3iii) Other environmental concerns  
General environmental objection Effect on flora and fauna. Unpredictable effect on the environment - need a sustainable option that puts the environment first. An environmental disaster; Odour / chimney fumes (2.3%) – already smell from recycling centre in summer and Staffordshire By-Products - Bibby factory; Noise from site (0.9%) Noise is only considered at ground level, not noise from the chimney; Heritage / conservation / cultural effects – general (0.5%); Adverse impact on biodiversity (0.5%); Flood plain (0.2%); Will attract vermin.
- 4) Locational concerns
  - 4i) Effect on Battlefield Heritage Site. Will affect views; may be illegal. To build this within ¼ mile of a great historic site and tourist attraction is crazy. How can the environmental statement by "independent consultants" claim negligible effect in this valuable heritage area when the heritage footpaths go within 2/300 metres of the proposed plant? If built, this incinerator will completely change the topography of the battlefield church area and destroy Shrewsbury's 'jewel in the crown' for future generations.
  - 4ii) Proximity to housing / schools / densely populated area. Wiser to put the incinerator in an area where which is of a minority of people.
  - 4iii) Impact on food / agriculture / farmland / food outlets; pollution of soil, crops, animals: Dioxins are absorbed into animal fats. Ireland, where there are no waste incinerators has 10 times lower measurements than the rest of Europe where incinerators are in operation. Undermines food security: - Climate change makes food production more difficult. Dioxins from the incinerator would be a further risk to food production. Toxic substances become more concentrated as they work up the food chain.
  - 4iv) Proximity to food enterprise park
  - 4v) Not the right location. Why are all industrial buildings put in the congested north of Shrewsbury? Should be on east edge of Shrewsbury where prevailing winds will not affect other businesses and residential areas. Yet again Harlescott has to stand the brunt of further invasion of noise and pollution which makes our existence as residents even more uncomfortable and unhealthy location should not be decided on basis of environmentally acceptable location not council ownership. Should at the site of Ironbridge

Power Station if and when it closes, or former sugar beet factory at Allscott. It is nonsensical to locate such a development in an area of the West Midlands where there is such a low population and thus low levels of waste production. Should be on an industrial estate miles from small business and housing estates. Why pollute scenic Shropshire when there is a facility on the doorstep in Birmingham to process our fraction of the regional waste?

5. Technical concerns

- 5i) Wastes energy – Inefficient way of generating electricity. Produce little energy relative to input. Small amount of electricity produced is not worth the potential health risk; wastes more energy than it produces and burns valuable materials; Recycling saves much more energy than is gained through incinerator and can be a source of energy; Will not generate sufficient energy to justify such a large proportion of Shropshire's waste being incinerated rather than recycled over the next 30 years. Not a renewable energy installation, as the vast majority of its fuel will come from non-renewable sources. The electricity generated will not go to the residents to cut to reduce energy or council tax bills. Energy benefits industrial centres whilst cost is borne by local residents. Title 'energy recovery facility' is misleading as negligible energy is recovered. Doesn't meet the EU waste directive efficiency standard – doesn't qualify as 'energy recovery'. Generates 8MW but uses 1.5MW therefore only 6.5MW exported. Generator could be more efficient (10MW not 8MW).
- 5ii) Outdated technology / backward step. Based on 10+ yr old French design. France, has decided to prioritise reduction & recycling rather than treatment & incineration. Wales and Scotland are moving away from incineration. Bias towards old technology rather than careful evaluation of all available technology options over a 27 year contract. Inflexible – cant adapt to fluctuations in input rates.
- 5iii) Questioning reliability of emission monitoring. Six monthly dioxin monitoring. Veolia should not be informed when tests take place. Concerns over the lack of constant checking - twice per year, plus two (28 day notice) checks by the EA. Doesn't take account of specific and well known meteorological effects. Belgian Government introduced legislation in 2000 which requires continuous monitoring of dioxins and furans from all refuse incinerators.
- 5iv) No heat will be used. Any permission should require use of heat. Site is in the right location for a district heating scheme. None of the existing nearby companies are so far interested in hot water take.
- 5v) Capacity is too large – will further discourage recycling. Effective recycling will reduce the need for incineration. Output should be limited to 90,000tpa with no increase in capacity.
- 5vi) Abatement process danger – mixing acid gases and lime.
- 6) Other
- 6i) Property blight / devaluation – no one would want to buy nearby houses. Will

not encourage first time buyers.

- 6ii) Effect on tourism / image of historic county town / local business. Will clearly be seen from Shrewsbury, a town that relies heavily on tourism. Not a good advert to those visiting from outside the region. The construction of such a development, with the chimney stack visible from many miles away, would not be a suitable first impression for visitors.
- 6iii) General objection. The dangers far outweigh the benefits. Human cost should be placed before convenience. The long term social / economical and environmental effects have not been considered at all. The impact of this is very negative and unnecessary on this site.
- 7. General support. If properly managed & controlled it will be a great asset to the community. We are faced with a need for energy and a problem of disposing of waste. Obviously our first aim must be to reduce waste but waste there will always be. The issues of the environmental effects of the installation have all been adequately covered in the application.

8.4 In addition, representations have been received from a number of individuals and organisations with specific interests in the current application. These are summarised as follows:

8.5 Albright Hussey Hotel – Objection on the following grounds:

- i. Pollution: If the risks are so low why is there a need to build a 65m high chimney to disperse the pollutants? Emissions are not 100% safe. Will surrounding fields still pass as being suitable for organic crop cultivation? What affect will the pollutants have in the food chain? No independent assessment of the health risk of the proposed Battlefield incinerator.
- ii. Odours: The facility is likely to emit smells and attract vermin impinging on the amenity of local residents and businesses especially with the existing Food Enterprise Centre and the planned Food Enterprise Park both adjacent to the left of the existing HRC facility will become a heaven for vermin.
- iii. Visual Effects and Airborne noise: Objection to the visual effect of the 65 metre high chimney and the height and aspect of the 28 metres high building. Already the present roof of the HRC is very evident from the Albright Hussey Hotel. The 24-hour operations would have a negative impact on both the visual amenity and audible to local residents and the Battlefield Heritage Area, and thus our hotel. The viewpoints in the ES give a false image from the Albright Hussey.
- iv. Location: The location is adjacent or possibly on the original fields of the Battle of Shrewsbury. Shrewsbury and Shropshire's best assets are the historical wealth and this feeds a huge tourist industry. This site could not be more exposed to all the inhabitants of Shrewsbury and all visitors to the area. Shrewsbury will become infamous as the town that built an incinerator on its battlefield.
- v. Loss of trade. The Albright Hussey Hotel is a very successful 4 star 26-

bedroom hotel, as a very well know wedding venue and a healthy restaurant trade. With our 30+ strong, dedicated local work force, we cater for guests from all over the country and world, we are using local produce from within a 10 mile radius of our property. We are an important asset for Shrewsbury's tourist trade. Many guests visit the Albright Hussey Hotel because it is located in the beautiful county of Shropshire with its beautiful surrounding countryside, views and fresh air. If the incinerator were to go ahead it would adversely affect these qualities. Even if you can prove there will be no pollution or bad odours you cannot hide from the visual impact the site will have on the landscape. Concern is expressed that guests will take their business elsewhere.

- vi. Duty of care: There are numerous examples of industrial processes that have been stopped once the accumulative impact on human health was fully understood. Now 'modern incinerators' are proposed by operators as being safe....without adequate research on fine particle emissions and with the same assurances as with previous health failures....'there is no research which shows the process is dangerous' being used as justification. It is extremely unwise to allow the building of the EWF incinerator facility so close to residential area of Shrewsbury. It would also be unwise to assume that the information being submitted (and not submitted) by Veolia is anything other than selective.

#### 8.6 Balfours, on behalf of The Trustees of Sundome Estate Objection:

- i. Contrary to Adopted Policy: The adopted Waste Plan clearly identifies Site SA1 Battlefield as being suitable for an *'Integrated municipal waste management site including recycling, in-vessel composting and small scale energy recovery, excluding mass burn incineration'* As the policies in this plan were reviewed and 'saved' as recently as 2005, it undermines confidence in the planning system to depart from policy without an overriding proven need in the public interest. Balfours clients consider the case for a mass burn incinerator has not been sufficiently robust to justify a departure from existing policy and should therefore be refused on policy grounds. Balfours clients also consider that the long term need for the plant has been over estimated and that if a greater emphasis was placed on recycling and taking current trends into account, the quantity of municipal waste requiring disposal could be reduced to a point where the incinerator plant could not be sustained using local waste alone. Balfours clients are concerned that Shrewsbury should not become the disposal centre for surrounding administrative areas.
- ii. Potential Risk to Public Health: The EC Framework Directive on Waste sets out objectives for the disposal of waste. Article 4 for example, requires that "member states .., ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment....". Balfours clients consider that the proposed incinerator does have health repercussions and we are particularly concerned with the fine particulate (less thanPM2.5) pollution. This ultra-fine nano particles, emitted from the stack, are not monitored or controlled in this country, but can be absorbed into the body resulting in long term health problems. In addition to the particulates which are breathed in, Balfours state that further harm to the environment is created by a build up of contaminants

on soil and vegetation which will eventually be absorbed by livestock and potentially leach into the water supply. Balfours clients therefore consider that the Council would be contravening Article 4 of the EC Directive on Waste and one of its own key objectives of the Waste Local Plan (4.2D) if the incinerator was permitted in any location as there is now a body of sufficient evidence to demonstrate the likelihood of harm to human health and the surrounding environment as a direct result of this form of incineration. Approximately 25% of the Counties population live in the Shrewsbury area, if there is any risk of poisonous emissions from the plant, at any measurable level, at any time during its operating life, it is considered totally unacceptable to locate the incinerator close to the maximum number of people who could be affected. On this basis alone Balfours consider the Battlefield site should be eliminated as unsuitable for the proposed use in accordance with the Council's key objective *"to avoid locating waste management facilities where they could cause harm to human health or incur unacceptable adverse impacts on the environment"*. It is stated that incinerators do produce persistent organic pollutants, which are then emitted into the air and water, and are present in the incinerator ash. Balfours state that the scientific argument is focused on the quantity of toxins produced, how frequently they are measured and their cumulative effects. Air pollution is a material planning consideration and it is considered the potential harmful effects could be avoided altogether by employing alternative technology which eradicate toxic airborne emissions and vitrify the fly ash. As Shropshire is an agrarian society Balfours consider the potential long term repercussions could be catastrophic for farming down wind of a polluting chimney. Even if the emissions are within currently acceptable guidelines, Balfours state that the cumulative effect over the life time of the plant must be considered, not just infrequent sample readings taken on a given monitoring day. On this basis Balfours consider alternative technology should be employed.

- iii. Detrimental Effect on the Character and appearance of the area: The sheer size, mass and siting of the plant will appear incongruous in the surrounding area, particularly when viewed from the north and east. The application states that a 65 metre high chimney is required for dispersal of the emissions. This chimney will permanently dominate the skyline despite which colour it is painted and does not, in itself, actually prevent the emissions to which we object. Balfours state that the landscaping proposed will never actually obscure the chimney or the flume arising and the full screening effect of the trees will take many years of maturity before the appearance or bulk of the development is visually reduced.
- iv. Detrimental effect on the amenity of local residents: Balfours note the statement that the local road capacity can accommodate the likely increase in traffic the proposal could generate, but are concerned at the lack of empirical evidence within the highway report relating in particular to the inherent capacity of the nearby roundabouts which the associated tankers will be required to navigate to and from Vanguard way. The operation proposed is a 24 hour facility with the main traffic visiting within approved daytime hours, the access required outside of these hours is vague and un-quantified and it is therefore difficult to assess the potential night time disturbance to surrounding residents and those living near the main approach roads. Without the benefit of a full highway statement detailing vehicle movements Balfours anticipate

the amenity of private residential properties will be adversely affected in the vicinity of the plant and those located adjacent to the approach roads. It is stated that the noise generated by the increased numbers of Heavy Goods Vehicles and tankers manoeuvring in low gear through the series of roundabouts approaching Vanguard Way will cause increased background noise and vibration which will be particularly noticeable in the early evening and throughout the night. Balfours consider that this increased activity level will change the character of the area and is likely to reduce developer investment in new or refurbished residential properties in the vicinity of the plant and approach roads.

- v. Insufficient Regard to the Surrounding Environment: Balfours advise that the Waste Local Plan requires any development on the Battlefield site to undertake an assessment of flood risk and drainage issues in the vicinity of Battlefield Brook and states that flood storage compensation measures may be required, in addition to requiring that any facility be sited on an impermeable base. This is not just to ensure development is above potential flood levels but to ensure the major underlying aquifer remains unpolluted and that contaminants do not get into the adjacent water courses and onsite pond, this provision specifically includes airborne contamination. Balfours state that it is not clear from the detail of the application exactly how surface run off will be controlled or what happens to the contents of the containment pools mentioned, which it is assumed will be contaminated through surface debris and will therefore be unsuitable for discharging into Battlefield Brook. The application identifies the presence of a number of protected species in the vicinity including a badger set but does not include specific mitigation measures to satisfactorily ensure the protection or enhancement of surrounding species or habitat.
- vi. Insufficient mitigation has been incorporated into the scheme: Balfours consider that current requirements for monitoring of emissions are insufficient and the Council is urged to consider the imposition of continuous monitoring to ensure dioxins, furans and other volatile matter are not discharged. Balfours also consider that the level of hazardous waste stored on site and transported from site has not been fully quantified either in terms of volume or in terms of its safety requirements. Where do the flue gas treatment residues go in their sealed tankers and do these residues represent a further hazard en route and at their final destination? Controls are required in connection with the level and duration of night time activity and associated illumination.
- vii. For the above reasons Balfours consider the application should be refused and request that a formal response is sought regarding the requirement for the application to be called in for determination by the Secretary of State as a matter of major importance with more than local significance.

8.7 Battlefield Farm Shop A petition containing 356 objections to the proposed VEOLIA (EFW) incinerator application has been received from Shrewsbury Friends of the Earth. The accompanying letter states that 'the signatories are customers of the Farm Shop who are mainly residents of Shrewsbury and outlying villages. Some are visiting the town from further afield, still wanting to express an opinion and importantly, share the concerns of the people of Shropshire over this proposal. As customers of this valued food outlet, they are wanting to register their

disagreement with Shropshire Council's current position to allow the above application to go forward'. By signing , they are supporting the Friends of the Earth campaign objective to say NO to the Battlefield incinerator.

- 8.8 Country Land & Business Association (CLA) - The CLA represents landowners, farmers and rural businesses throughout Shropshire who manage the land within the vicinity of the proposed site as well as rural businesses. CLA members produce high value arable crops and dairy produce. The majority of these crops are destined for human consumption and include bread making and malting wheat, barley, oil seed rape, potatoes and horticultural crops. Crops grown locally will also be used for animal feed. Some of the nearby land is managed under organic systems. CLA members have expressed a number of concerns about the above planning application for an energy from waste facility on the Battlefields Enterprise Park, Shrewsbury, The Environmental Statement does not include an assessment of the likely impacts on the surrounding agricultural land (Section 3.3 Surrounding and Neighbouring Land Uses) and our members are concerned that Veolia have not taken account of the importance of food production in the Shrewsbury area. An increase in the levels of trace elements on the land can cause significant problems for crop production. CLA members are concerned about the dioxins and would like to see more real time monitoring as these could collect in nearby farmland. CLA are concerned that as the waste is not being separated for recycling or composting to generate energy, and burning this undifferentiated waste could deliver as little as 20% of the energy in the waste, by way of electrical and heat output. The best environmental option is to split the waste (separate collections) into what can go into Anaerobic Digestion and what should be gasified or pyrolised. Therefore the CLA urge the Council to insist that a robust assessment of the impacts on local agricultural production and business is completed before the development is considered for possible approval.
- 8.9 Shrewsbury Friends of the Earth (Response to original application) - Object for the following reasons:
- i. It doesn't accord with the Shropshire Waste Local Plan Policy 17 (pg 57) which states that "proposals to recover energy from waste will be permitted in appropriate locations where it can be demonstrated that... A, the proposal forms an essential part of a sustainable waste management system". The word essential is very strong, Veolia have not shown that this application meets it and it's clear that this proposal is most definitely not essential.
  - ii. It doesn't accord with the Waste Local Plan's profile of the Battlefield site which explicitly excludes mass burn incineration (pg94). This profile was backed up by the Waste Plan Inspector in his report on the inquiry into the Plan. Veolia try to assert that at 90,000 tonnes/annum their proposal isn't mass burn, however whilst it may be a relatively small example of the technology it most definitely is a mass burn incinerator.
  - iii. It doesn't accord with the 2007 UK Waste Strategy which emphasises the need for "flexibility, eg modular buildings and also flexible contracts which do not lock in fixed amounts of waste for treatment which might become obsolete". At 90,000tpa the proposal is big enough to take all of Shropshire's municipal waste that's currently landfilled and more. This goes against local and national Governments policies to reduce waste and increase recycling.

Whatever we do in these fields in the next 35 years there would still be 90,000t of waste burnt in the county each year. This is simply unacceptable.

- iv. The electricity produced will be at an staggeringly low efficiency of under 26%, This is as bad as an open fire for which the Government gives grants to encourage householders to replace. If the waste heat was used this efficiency would rise but there are no definite or credible proposals to use the heat in Veolia's application. Even this low figure doesn't take into account the energy needed to mine, process and transport new resources to replace those burnt that could have been recycled.
- v. It will produce unacceptably high levels of Carbon Dioxide emissions, at 4 times the UK average for electricity production in kgs of CO<sub>2</sub>/KWh. This is contrary to the Government's recent commitment through the Climate Change Act to reduce CO<sub>2</sub> emissions by 3%/year to reach 80% reductions by 2050. The Government has also stated in the 2007 Waste Strategy that we expect greenhouse gas emissions to be a key consideration of those developing waste to energy plants". We are shocked that Veolia's planning application makes little mention of the crucial issue of greenhouse gas emissions.
- vi. The proposal could lead to a higher amount of material being landfilled in future years than under a strategy based on minimising waste and maximising recycling and composting. Much of this will be hazardous waste which will need to be transported to specialist facilities for disposal. This runs counter to the waste hierarchy which puts landfill as the least acceptable option.
- vii. Even if less material is landfilled, that material will only be lifted one rung up the waste hierarchy, well below the upper rungs of minimisation and recycling.
- viii. The West Midlands already incinerates a higher proportion of its waste than indicated in the Government's 2007 Waste Strategy (31% against a target of 25%). There are also several other proposals for new incinerators in the region. This will lead to an overprovision of incineration facilities.
- ix. There is no great demand for the incineration of commercial waste and companies should be encouraged to minimise their waste and increase recycling, as many are already doing, not given the option of incineration. If local commercial waste doesn't make up the shortfall anticipated then waste would have to be transported into the county for burning. This goes against the proximity principle.
- x. The proposal poses a risk to the health and well being of the people of Shropshire from possible air and water pollution. It's clear from the inspector's report to the inquiry for the proposed Kidderminster incinerator that perceived risk from incineration is a valid planning issue and one that needs to be taken seriously. The report on the Shropshire Waste Local Plan inquiry also states the impact on public health of future proposals from energy from waste plants etc would be fully addressed when detailed planning applications are submitted" (para 3,5) In tying us into one technology for the whole county and for 35 years this proposal also poses great financial risks, It's likely that an incineration tax will be introduced in that time, certainly the costs of pollution control will increase and the costs of landfilling the ash could rise enormously

as landfill space becomes scarcer. There's also the possibility of litigation for health problems associated with the incinerator. It's clear to us that the risks posed by the proposed incinerator are unacceptable and unnecessary. There are cheaper, more flexible and more acceptable ways of dealing with Shropshire's waste already available and many interesting developments in the pipeline. Waste levels in Shropshire are starting to fall and recycling rates are rising fast. Shropshire Council and their contractors should build on the excellent work done over the last few years which has transformed the waste scene in the County, not take the retrograde step of building an incinerator.

- xi Shrewsbury Friends of the Earth therefore urge Shropshire Council Planning Committee to reject this unpopular proposal. There are good precedents for doing this, particularly from Kidderminster\* (2002) and Cornwall (2009). In the Kidderminster case the Worcester County Planning Committee rejected the proposal even though it was backed by Worcester County as a Waste Authority. This decision was upheld by the Inspector on appeal.

Note: The FOE has supplemented this objection with a more detailed justification which can be inspected in the Member's secretary's room.

8.10 Shrewsbury Friends of the Earth (Response to additional information): - Objection. We see nothing in the further information provided by Veolia to change our strong view that this application: 1) is against the Waste Local Plan because, A, it's a mass burn incinerator, - the repeated assertion that this isn't so is absurd. B, its unnecessary. Necessity is a key requirement of the WLP but they've done nothing to prove that this scheme fulfils that criteria, 2) is unsustainable. We particularly disagree strongly with their figures and conclusions on recycling levels and carbon emissions and don't believe that the heat will ever be used.

- i. Mass burn It was quite clear at the Waste Local Plan inquiry that the exclusion of 'mass burn incineration' at this site had nothing to do with the size of the plant or how much was recycled before the residue was sent for burning but referred to the actual technique which Veolia are proposing. Its quite clear that the plant if built would limit recycling, albeit to a level of 52%, they state this figure is a minimum but their table on pg 7 assumes it won't be exceeded and this would be a very difficult thing to achieve if the burner is built. However recent studies have shown levels of 80% recycling to be not only possible but economic. Therefore at least 60% of what will be burnt at the plant could be economically recycled in the current climate. With increasing resource problems and growing recycling opportunities over the coming 20 years we believe much higher levels could be attained, therefore can't argue that they're only going to burn residual waste and therefore isn't 'mass burn'.
- ii. Unnecessary The above quoted study on recycling and the fact that a number of proposed incinerators have recently been cancelled or turned down shows that economic alternatives do exist.
- iii. Unsustainable Veolia contend that incineration saves carbon whereas a report for the London waste strategy clearly states that 'the best performing scenarios, in terms of their greenhouse gas impact were those based on either mechanical biological treatment followed by anaerobic digestion'" and "scenarios using incineration were amongst the poorest performing", (the

report summary is attached, item 1), The debate about what carbon emissions should be counted and how is a rather esoteric one but appendix 3 of the London waste strategy report states that 'the crucial point here is that for the don't burn our waste - reduce it, re-use it, recycle it (or use Anaerobic Digestion). Non fossil fuel CO<sub>2</sub> from incineration is effectively not reported...This is exactly what Veolia have done to come to their erroneous conclusion that the scheme would reduce carbon emissions. We also contend that: 1, the comparison to landfill is wrong as much of the material burnt could and should be recycled; 2, the figures stated for different forms of electricity generation are contentious (these figures were provided by consultants with large contracts in incineration). What is clear is that without use of the heat the incinerator would be under 20% efficient. This is worse than an open fire and we just can't afford to utilise any material that inefficiently, even so called 'waste'. Whilst Veolia state that they have had discussions about possible use of the heat they don't state any responses. We're sure that if they'd had positive responses they would have reported them so can only conclude that they haven't received any. Very few incinerators make effective use of the heat and we don't see that a viable plan exists to do so with this scheme, but without it the plant is just grossly inefficient. We therefore continue to urge Shropshire Council to refuse this application and work on more sustainable ways of dealing with Shropshire's waste. Note: The FOE has supplemented this objection with a more detailed justification which can be inspected in the Member's secretary's room.

#### 8.11 West Midlands Friends of the Earth (response to original application)

Objection for the following reasons:

- i. It doesn't accord with the Shropshire Waste Local Plan Policy 17 (pg 57) which states that "proposals to recover energy from waste will be permitted in appropriate locations where it can be demonstrated that... A, the proposal forms an essential part of a sustainable waste management system". The word essential is very strong, Veolia have not shown that this application meets it and it's clear that this proposal is most definitely not essential.
- ii. It doesn't accord with the Waste Local Plan's profile of the Battlefield site which explicitly excludes mass burn incineration (pg94). This profile was backed up by the Waste Plan Inspector in his report on the inquiry into the Plan. Veolia try to assert that at 90,000 tonnes/annum their proposal isn't mass burn, however whilst it may be a relatively small example of the technology it most definitely is a mass burn incinerator.
- iii. It doesn't accord with the 2007 UK Waste Strategy which emphasises the need for 'flexibility, e.g. modular buildings and also flexible contracts which do not lock in fixed amounts of waste for treatment which might become obsolete". At 90,000t/a the proposal is big enough to take all of Shropshire's municipal waste that's currently landfilled and more. This goes against local and national Governments policies to reduce waste and increase recycling. Whatever we do in these fields in the next 35 years there would still be 90,000t of waste burnt in the county each year. This is simply unacceptable.
- iv. The electricity produced will be at a staggeringly low efficiency of under 25%. This is as bad as an open fire for which the Government gives grants to

encourage householders to replace. If the waste heat was used this efficiency would rise but there are no definite or credible proposals to use the heat in Veolia's application. Even this low figure doesn't take into account the energy needed to mine, process and transport new resources to replace those burnt that could have been recycled.

- v. It will produce unacceptably high levels of Carbon Dioxide emissions, at 4 times the UK average for electricity production in kgs of CO<sub>2</sub>/KWE This is contrary to the Government's recent commitment through the Climate Change Act to reduce CO<sub>2</sub> emissions by 3%/year to reach 80% reductions by 2050. The Government has also stated in the 2007 Waste Strategy that we expect greenhouse gas emissions to be a key consideration of those developing waste to energy plants. We are shocked that Veolia's planning application makes little mention of the crucial issue of greenhouse gas emissions.
- vi. The proposal could lead to a higher amount of material being landfilled in future years than under a strategy based on minimising waste and maximising recycling and composting. Much of this will be hazardous waste which will need to be transported to specialist facilities for disposal. This runs counter to the waste hierarchy which puts landfill as the least acceptable option. 7, Even if less material is landfilled, that material will only be lifted one rung up the waste hierarchy, well below the upper rungs of minimisation and recycling.
- vii. The West Midlands already incinerates a higher proportion of its waste than indicated in the Government's 2007 Waste Strategy (31% against a target of 25%). There are also several other proposals for new incinerators in the region. This will lead to an overprovision of incineration facilities.
- viii. There is no great demand for the incineration of commercial waste and companies should be encouraged to minimise their waste and increase recycling, as many are already doing, not given the option of incineration. If local commercial waste doesn't make up the shortfall anticipated then waste would have to be transported into the county for burning. This goes against the proximity principle.
- ix. The proposal poses a risk to the health and well being of the people of Shropshire from possible air and water pollution. It's clear from the Inspector's report to the inquiry for the proposed Kidderminster incinerator that perceived risk from incineration is a valid planning issue and one that needs to be taken seriously. The report on the Shropshire Waste Local Plan inquiry also states "the impact on public health of future proposals from energy from waste plants etc would be fully addressed when detailed planning applications are submitted" (para 3.5) In tying us into one technology for the whole county and for 35 years this proposal also poses great financial risks. It's likely that an incineration tax will be introduced in that time, certainly the costs of pollution control will increase and the costs of landfilling the ash could rise enormously as landfill space becomes scarcer. There's also the possibility of litigation for health problems associated with the incinerator. It's clear to us that the risks posed by the proposed incinerator are unacceptable and unnecessary.
- x. There are cheaper, more flexible and more acceptable ways of dealing with Shropshire's waste already available and many interesting developments in

the pipeline. Waste levels in Shropshire are starting to fall and recycling rates are rising fast. Shropshire Council and their contractors should build on the excellent work done over the last few years which has transformed the waste scene in the County, not take the retrograde step of building an incinerator. We therefore urge the Shropshire Council Planning Committee to reject this unpopular proposal. There are good precedents for doing this, particularly from Kidderminster\* (2002) and Cornwall (2009). \*In the Kidderminster case the Worcester County Planning Committee rejected the proposal even though it was backed by Worcester County as a Waste Authority. This decision was upheld by the Inspector on appeal.

Note: The FOE has supplemented this objection with a more detailed justification which can be inspected in the Member's Library.

8.12 West Midlands Friends of the Earth (response to additional information) - We have a number of points to make BUT would point you to our support for responses from Shrewsbury FOE and Safe Waste in Shropshire and indeed a number of individuals from across the county.

- i. Recycling rates These are increasing locally and across the country as a whole. This should be encouraged and building a mass burner is one way to not encourage active and increased participation in recycling. The Select Committee on Environment, Food and Rural Affairs recently called for 50% recycling within five years and 60% by 2020 (1). We would support other administration's goals for 70% targets which are already being achieved within some parts of Europe such as Flanders. Indeed the Welsh Assembly Government has recently indicated that over 90% of resources that currently remain in our waste streams could be recycled or composted / anaerobically digested. This would be cheaper for Shropshire and would also open up the opportunity to invest in more progressive forms of technology to treat any so called residual including a food collection service linking in with an anaerobic digestion plant. The direction of travel from the select committee would lead local authorities away from mass burn. Indeed more and more evidence is emerging that the presence of a burner leads to a lack of ambition to improve recycling rates. Veolia states that 31.5% of its assumed waste input to Battlefield would be paper, cardboard and garden and kitchen waste and a further 21.4% would be non-combustibles including ferrous metal. cans soil and glass; most of this 73% could be mechanically recovered and reused thus saving resources and avoiding the need for expensive technology such as a PFI funded mass burn incinerator. Why have solutions such as this been put forward as part of this process??
- ii. Waste Local Plan This application is not in line with the waste local plan. Indeed as recycling participation increases and waste arisings fall then will there not be less resources to burn. How will the local authority meet any shortfalls from municipal arisings?? is mass burn the best way in which to deal with those resources not just in terms of environmental performance BUT financial performance?
- iii. Carbon analysis This is flawed and is biased in favour of incineration and on old landfill performance criteria. If any residual that could be landfilled is pretreated to reduce the biodegradability of that material then the landfill

performance will change drastically. Indeed over time the inefficient nature of mass burn will lead to ever greater carbon emissions if 90 000 tonnes were to be burnt this would release 2 million tonnes of carbon dioxide over 25 years resulting in no real benefit from the small amount of electricity produced. As such the proposed plant will be unlikely to meet the efficiency requirements to be classed as recovery.

- iv. Heat recovery There is little evidence that the heat produced by the plant is going to be recovered and used. Have there been any conclusions or agreements on the discussion on usage of the heat?
- v. Regional picture The West Midlands region has a large number of incinerators at present and a number of proposals for new burners or increased capacity on one site. This could result in over capacity across the region. NOW is not the time to be adding to that capacity here in Shrewsbury especially when many of the other more progressive cost and carbon effective alternatives have not been fully investigated.

Note: The FOE has supplemented this objection with a more detailed justification which can be inspected in the Member's Library.

8.13 Hastonne Reynolds, Chartered Surveyors (for the Albrightonne Estate and the Battlefield 1403 Visitor Centre) – Objection on the following grounds:

- i. The majority of the Registered Site of the Battle of Shrewsbury forms part of the Albrightonne Estate and is owned, farmed and managed by Mrs Jagger. Over the last 10 years, significant private and public investment has been made in improving public access to the Registered Battlefield and in providing interpretation of the Battle of Shrewsbury. In the order of £300,000 of public money was sourced and invested by Shropshire County Council in, amongst other things, the formation of a surfaced public footpath network across the southern portion of the Battlefield and the provision of a series of historic interpretation panels. In 2006, planning applications for the development of a visitor centre at Battlefield Farm comprising a heritage centre, farm shop and restaurant were submitted by Mrs Joyce Jagger. The proposed visitor centre had two main objectives which were:
  - 1) To provide a dedicated heritage centre for the site for the battle of Shrewsbury which will facilitate existing interpretational, educational, heritage and tourism value of the Battlefield, facilitate public access to the northern portion of the Battlefield and act as a catalyst for further co-ordinated archaeological investigation, research and understanding of the battle, and;
  - 2) Diversify the existing farm business, reducing its reliance on income from conventional sources, adding value to the agricultural products and commodities it produces and ensuring the long term viability of the business as a whole whilst providing an outlet for other farms in the locality thereby enhancing the wider rural economy.
- ii. In recommending approval of the planning applications, the local planning authority's case officer advised Members that: "The centre will incorporate an educational facility in association with Shrewsbury Battlefield site which is one of 43 registered battlefield sites within England. The Site of the Battle of

Shrewsbury is probably one of the most significant educational, heritage and tourism assets. Shrewsbury and the proposed development will help to add to the range of tourism attraction in Shrewsbury." Planning permission for the visitor centre was granted in 2007, The visitor centre was privately financed and developed by Joyce and Jeremy Jagger and was formally opened in 2008 by Robert Hardy under the banner of 'Battlefield 1403. Since opening in April 2008, Battlefield 1403 has exceeded all expectations as a tourism and educational resource for the public and is used by numerous schools and other focal organisations. Battlefield 1403 also contributes to the local rural economy, providing direct employment for 27 people (22 full time equivalents) whilst supporting jobs on the Albrightonne Estate and another local farms and businesses which supply the farm shop and cafe. Building on this success, a planning application seeking to provide additional accommodation for school and other groups visiting the Battlefield has recently been submitted to the Local Planning Authority. The importance of, and the need to protect historical battlefield sites and their settings is recognised within national planning policy guidance, the Regional Spatial Strategy, the adopted Local Plan and the emerging Shropshire Council Core Strategy. Hastonne Reynolds consider that the development and operation of the proposed incinerator will result in significant harm to the setting of the Registered Site of the Battle of Shrewsbury, the setting of the Grade II\* listed Church of St Mary Magdalene which is also designated as a Scheduled Ancient Monument) and the future of the Battlefield 1403 visitor centre as an educational and tourism resource. Hastonne Reynolds also consider that the operation of the proposed incinerator could have long term adverse implications for food production and the Farm Assured status of the land to the north of the incinerator site which is farmed by Mrs Jagger and produces food which is sold through the Battlefield 1403 farm shop and cafe. Mrs Joyce Jagger and Mr Jeremy Jagger consequently object to this planning application with a view to safeguarding these interests. Further detailed objections are submitted with respect to:

- The principle of establishing a proposed EWE facility at the Battlefield site;
- The landscape and visual impact on the Battle of Shrewsbury site, the Grade II\* listed Church of St Mary Magdalene and the Battlefield 1403 Visitor Centre;
- Air Quality and Effect on Human Health;
- Effect on the Local Rural Economy;

iii. Hastonne Reynolds also state that the application should be referred to the Secretary of State for determination given that the site is owned by Shropshire Council, given that the contract to operate the proposed incinerator has essentially been awarded by Shropshire Council and given that Shropshire Council is the Waste Planning Authority.

Note: The detailed comments of Hastonne Reynolds in relation to the items listed above can be inspected in the Member's Library.

#### 8.14 National Farmers Union – Objection for the following reasons:

The NFU represents farmers throughout Shropshire, some of whom manage the land within the vicinity of the proposed site. They produce high value arable crops and dairy produce (for the liquid milk and processing markets). The majority of these crops are destined for human consumption and include bread making and

malting wheat, barley, oil seed rape, potatoes and horticultural crops. Crops grown locally will also be used for animal feed. Some of the nearby land is managed under an organic system. For any product it is essential that consumers have confidence in the item that they are purchasing, and this is even more important for food production. Farmers guarantee this through farm assurance schemes, which ensure that agricultural products have been produced to very demanding environmental and welfare standards. The Environmental Statement acknowledges that there will be an increase in the ground level concentration of pollutants and that this will include some heavy metals. I have serious concerns that many buyers (for supermarkets and other supply chains) will make a negative assessment of the exposure of these crops to heavy metals. This will inevitably place valuable contracts for agricultural produce at risk. Not only will this jeopardise farm businesses which continue to operate under severe financial pressures, but it may also devalue high grade agricultural land. The Environmental Statement does not include an assessment of the likely impacts on the surrounding agricultural land (Section 3.3 Surrounding and Neighbouring Land Uses) and our members are concerned that Veolia have not taken account of the importance of food production in the Shrewsbury area. An increase in the levels of trace elements on the land can cause significant problems for crop production. If trace element levels in the soil have to be adjusted by applying additional fertilisers and minerals, this will result in additional costs for the farmer. Therefore we urge the Council to insist that a robust assessment of the impacts on local agricultural production is completed before the development is considered for possible approval.

- 8.15 Shuckers Ltd – Objection. Our concerns are as follows: We already have to live with the foul smell either coming from ABP or Staffordshire Bye Products which can be uncomfortable and is often a point of conversation with our customers. We do contact the Environmental Department because at times the smell is really potent. We therefore do not wish to have any other air pollutants adding to this.
- 8.16 NOBIS (response to original application) - Objection. The detailed response of NOBIS in relation to the application as submitted is available for inspection in the Member's Library. The main issues raised by NOBIS are discussed further in section 10 of this report.
- 8.17 NOBIS (response to further information) - In overall terms NOBIS state that there does not appear to be very much new information in response to Shropshire Council's (SC) very detailed letter (18 pages) dated 17 August, 2009 seeking specific clarification on a very large number of points and issues. There is a considerable amount of referral back to the original submission (Environmental Statement) when clarification has been sought by SC. Where detail has been provided this appears to tend towards the areas of environmental management that are new, or poorly defined and could be considered to be full of assumptions. It would also seem that on a number of occasions VESS has questioned the reasons for these questions based on who should be statutorily responsible, Shropshire Council or the Environment Agency. The planning application was submitted by VESS in January 2009. During the latter part of 2009 there have been a number of significant developments with respect to waste incinerators. We believe the following decisions by a number of progressive, local authorities are indicative of a shift in decision making, in response to public concerns and policy direction from the EU and UK government. A number of local authorities have either refused planning permission for waste incinerators or moved away from and withdrawn from PFI funding for this specific waste disposal technique. (16 examples provided).

NOBIS state that it is becoming apparent that many local authorities do not consider EFW desirable, based on cost, performance and environmental considerations. Indeed, NOBIS consider that the following examples indicate the likely route many enlightened local authorities are taking to protect/conservate valuable resources to the benefit of their residents. It is stated that South Oxfordshire CC has committed to a 70% recycling rate. A new service commenced in June 2009 and is now regularly achieving this target. Although a reduction of green waste in the winter reduces rates, Oxfordshire expects to 'hit' a rate not far below 70%. It is worth noting that prior to the new service a recycling rate of 38% was being achieved. Food waste is now being collected. Rates: 70.6% June, 71.4% July and 70.5% Aug. This breaks down into; 36% dry recyclables, 21.6% garden waste and 12.9% food waste. The service provider is to start provision of a similar service in neighbouring Vale of the White Horse. Rochford, Essex (July 2008) is also committed to a 70% recycling rate. They went from a paid garden waste collection service to a free weekly collection of food and garden waste and also started accepting plastics and cardboard in it's dry recyclables collection. Rochford has achieved a rate of 70% in 2 months since launch. Miranda Curme (Recycling Officer) confirms that the 'rate has never dropped below 65%'. These desirable rates make VESS's target of 52.5% by 2013 and 52.8% by 2031 from a current base of 47.57% look particularly uninspiring. It is also worth noting at this point that the Top 5 Incinerators are in: Westminster, Lewisham, Coventry, Portsmouth and Birmingham. None of these operations on behalf of those particular local authorities comes above 100 out of the 121 in recycling. (DEFRA 2009). NOBIS make further detailed comments with respect to: Strategic Overview; Waste throughput and sources; Waste Source and Quantity, Alternative technologies, Carbon Analysis, Ash recycling / disposal; Energy Efficiency; Carbon Footprint and Visual amenity. Calculations are also provided with respect to Municipal Solid Waste. NOBIS state that the minimum case clearly indicates a significant shortfall in tonnages needed to operate the proposed incinerator efficiently. VESS already acknowledges that the 19.7 % nett efficiency is low 'for this type of plant'. It has been 'shoe-horned' in to make do. It is clear that the deficit must be made up from other sources. NOBIS state that VESS's targets for recycling are not very inspiring, only rising to 52.8% by 2031. Current levels are 47.57%. Not too difficult to raise this to 52.8% without much effort. Composition data indicates considerable scope to improve recycling rates to leave very small residuals of less than 20,000 tonnes. This would constitute approximately 20% of the envisaged residual collect and feed. The detailed response of NOBIS in relation to the additional information is available for inspection in the Member's Library. The main issues raised by NOBIS are discussed further in section 11 of this report.

- 8.18 Safe Waste in Shropshire (SWiS) (Response to original application) - SWiS contends that the proposal would lock the county into this inefficient, ineffective and globally harmful procedure for the next 25 years. Following the end of the current contract, Shropshire Council would be left with an outdated and failing piece of plant which would last, at best, another 14 years which they would then need to de-commission at great cost to the public. Shropshire Council faces bearing the cost of any litigation arising from health problems caused by incineration, by loss of revenue from a range of food-producers, all at a time when the financial basis for the contract, which relies on the ailing Private Finance Initiative, is looking increasingly shaky. SWiS maintains that the proposal represents a failure of confidence, forward-planning and duty of care to the people of Shropshire, It constitutes an unacceptable risk to the health, financial stability and environmental

quality of the whole county for the sake of an expensive and unstable 'quick-fix.' Shropshire Council should adopt best practice procedures in its waste management and make all efforts to replace this proposal with one that abides by EU and Government legislation and guidance, and one that takes into account the urgent need to conserve resources. SWiS has produced detailed objections covering the following subjects / headings:

- Contravention of waste targets and the government-approved waste hierarchy;
- Incompatibility of incineration and recycling;
- Lack of need;
- The proximity principle;
- Risk of non-compliance with national waste strategy and other up-coming legislation;
- Production of electricity, 'a highly inefficient, polluting and expensive 'power station';
- Planning policy statements;
- Application of the precautionary principle;
- Perception of unacceptable risk to health or safety;
- Matters for consideration in preparing local development documents and taking decisions on individual planning applications;
- Environmental issues (plume groundings; meteorological conditions; emissions; estimated and predicted nitrogen dioxide levels);
- Publicity and public consultation;
- Best available techniques (bat) future emission standards; continuous dioxin/furan monitoring;
- Democratic deficit;
- Employment

A copy of the full SWiS response to the application as submitted has been placed on deposit in the Member's secretary's room. The main issues raised by SWiS are discussed further in section 10 of this report.

#### 8.19 Leith Planning (on behalf of adjacent landowner)

- i. General procedures and application content: The applicant has failed to provide sufficient supporting information to judge the impact of the proposals which has resulted in failure to deal with the issues. The application should contain sufficient detail to enable the true nature of the proposal to be understood. New developments on the business park should be taken into account in considering the impact of the proposed EWF. The determination of the application will have to have full regard to government advice / guidance, policies of the Development Plan and the evolving policy framework. Attention is drawn to case law and issues.
- ii. Concerns raised by others: The document puts forward a number of issues ranging from matters raised by the local MP to general matters encompassing the proximity principle and other approved incinerators in the region, visual impact, protection of water resources, visual intrusion, nature conservation (including Ramsar sites), historic environment and built heritage(e.g. the registered battlefield), air emissions including dust, odours, vermin and birds, noise and vibration, litter and the possible need for call-in by Government Office.
- iii. Concerns raised by Morris Properties on behalf of tenants: There is concern that the effect of the proposal not only on local amenity but upon other prospective

investment, the issue of prematurity and general local effects as previously stated. A set of conditions are suggested to be attached to the grant of any planning permission.

iv. Summary of concerns: For the avoidance of doubt the concerns in respect of the proposed development are summarised as follows:

- Impact on visual amenity;
- Premature nature of the development;
- Impact on adjacent amenity;
- Impact on site ecology and biodiversity;
- Impact on future local investment;
- Highway access and manoeuvrability concerns;
- Impact on neighbouring businesses;
- Flood risk and groundwater pollution.

8.20 Safety in Waste and Rubbish Disposal (SWARD) – The organisation objects to the planning application on the grounds of fears and concerns relating to the disposal of residues from the proposed facility. The group notes that the application proposes the production of 267,100 tonnes of residual ash each year (incinerator bottom ash and flue gas treatment residues), all of which could be hazardous waste. The proposed methods of disposing of these residues which have the potential to be detrimental to the environment and human health are uncertain. There are serious concerns about the impact on communities represented by SWARD.

8.21 Safe Waste in Shropshire (SWiS) (Response to further information) - SWiS Detailed objections are enclosed covering the following headings / matters:

- Incinerator Bottom Ash: uncertainty as to its safety and future costs to Local Authorities - the emerging situation in the UK;
- The negative health effects of incineration - recent evidence;
- The Precautionary Principle;
- Violation of the proximity principle - Veolia's Hampshire model and current incinerator over-capacity in the West Midlands;
- Alternative Technologies.

Safe Waste in Shropshire state that some 16 applications for incinerators were turned down in 2009 in favour of more carbon and environmentally friendly (not to mention cheaper) options such as AD, MBT, composting and much more ambitious waste reduction strategies than are currently proposed in Shropshire. They further state that it would be actually cheaper to do nothing (rather than build an incinerator), which is a serious indictment of the Waste PFI contract. Many LAs are renegotiating their Waste Contracts to avoid building incinerators. SWiS note that there are cost implications but in the long-run, they state that all the indications are that this would be a far cheaper and more forward-thinking option than going ahead with this flawed, damaging and costly proposal.

A copy of the full SWiS response to the further information has been placed on deposit in the Member's secretary's roomy. The main issues raised by SWiS are discussed further in section 11 of this report.

8.22 Shrewsbury Town Centre Residents Association - Objection. The Residents Association is concerned with the disposal of waste and does not lose interest just because it has left the town centre. The Association understands the need to avoid landfill wherever possible, but submits that this planning application for an incinerator is not the solution to this problem, and that there are better ways of managing it. The Association recognises four main issues raised by this planning application. They comprise possible legal issues, breaches of waste management key objectives, the effect of effluent from the incinerator and whether this proposal is the best answer to solve the problems of Shropshire's non-recyclable waste disposal.

- i. Legal issues In the Shropshire Municipal Waste Management Strategy 2000-2020 it is stated on page 23 that a "mass-burn incinerator is unlikely to be appropriate for Shropshire". On page 11 Option 8, headed "Energy from Waste Facility", states that "Energy from waste was also seen as having a high capital cost and as not the most sustainable way of managing waste". Furthermore in the Shropshire Waste Local Plan (WLP) 2002 Appendix 1 on Site Profiles describes the potential uses of the Battlefield site as an "integrated municipal waste management site including recycling, in-vessel composting and small scale energy recovery, excluding mass-burn incineration". This surely indicates that the Council policy is against mass-burn incineration on the Battlefield site. Labelling this proposal as an Energy from Waste Facility does not change it from a mass-burn incinerator. The essay in the applicant's Design and Access Statement claims that incinerating 90,000 tonnes of Biodegradable Municipal Waste (= BMW) was not mass-burn but a Small Scale Energy Recovery facility and that WLP Policy 6, in referring to the Battlefield site as not having the potential use of mass-burn incineration, was only indicative and not prescriptive - 90,000 tonnes of BMW equates to 300 tonnes daily, which surely is not "Small Scale", and the Policy 6 clearly states "the exclusion of mass burn incineration" in relation to the Battlefield site, and it cannot be optional. These statements are surely not sustainable as an argument, and contradict the detailed analysis of waste management policy in the Council's documents. Accordingly we see this proposal as being a major development in breach of stated Council policy, which therefore should be determined by authority other than the Council. Secondly the expected cost is well over £40M, a highly significant capital investment, and on that ground alone it merits referral for decision to the Government Office of the West Midlands. Thirdly, in several of the Council's documents there is an apparent commitment by the Council to approve this proposal. This commitment was made by Shropshire County Council, but we understand all the contracts and policies agreed by the previous Shropshire councils have been transferred to the new unitary authority, so it still applies. Moreover as recently as February 9th 2009 the Waste Management department of the Council published on the Council website a document describing the Energy from Waste Facility, which reads as clear support for the proposal. However certain it may be that planning committee members will assess the proposal independently of the Council's stated aims, it would not be seen to be in the interest of justice and fairness for the Council's own planning authority to take the decision. For these three reasons it is our opinion that this planning application should be placed in the hands of the Secretary of State for Communities and Local Government for decision, unless of course the planning officers advising the

relevant planning committee recommend refusal and the refusal is supported by the councillors on the Planning Authority.

- ii. Waste Management Partnership policies Of the thirteen Key Objectives in the 2004 Shropshire Waste Management Plan, seven appear to be in conflict with these proposals. Key Objective A seeks to ensure 'regional self-sufficiency where this would satisfy the proximity principle". It is designed to limit transport movements both within and from without the county. First, the proposal involves transferring BMW from all parts of the county except Telford & Wrekin Council area to the Battlefield site, which involves a substantial mileage for transferring BMW. Secondly and most importantly the proposal is planned to incinerate 90,000 tonnes of BMW each year, but the application lists predictions of annual BMW as 51,800 tonnes available from Shropshire in 2010/2011 and by 2020/21 this would 58,160 tonnes. Where is the deficit of over 30,000 tonnes, which is 30%, of BMW to come from? This deficit is not explained in the available documentation. If it is to be imported from neighbouring 2 areas, surely the proximity principle will be breached, and how will they know toxic material is not present? Key Objective D deals with the need "to avoid locating waste management facilities where they could cause harm to human health or incur unacceptable adverse impacts on the environment". The current use of the Battlefield site for re-cycling does not breach this Key Objective, but incineration with its toxic effluents can cause harm to human health and could damage the local agricultural land making it ineligible for recognition as 'organic farmland' to the detriment of the community. The Design & Access Statement only claims that "emissions from the EWF do not pose a significant risk to health arising from exposures via either inhalation or the ingestion of foods", but that means there is some risk to health. The Battlefield Brook is directly adjacent to this site and half the Battlefield re-cycling site is in the flood plain, so there must be a serious risk of pollution of the water course either when there is a flood or when there is an accident on the site. The impact that the proposal will have on the environment in terms of its appearance is also unacceptable. The huge bulk - the building will be the largest single building in Shropshire - and its extremely high chimney stack - 65 metres is over 200 feet - will make it the most prominent building in the Shropshire plain. Because it is on the edge of the plain, the chimney will be seen from at least seventeen miles away (using the formula (number of miles = square root of 3/2 times the height in feet), and the plume of smoke emitted twenty four hours a day for over 8000 hours in the year will be seen from even further away. It will detract seriously from the ambience of the nearby protected site of the Battlefield itself Key Objectives E, F and G deal with adverse environmental impacts and transport of waste, which are relevant to effluent, which is discussed in the next section. Key Objective I refers to new developments in waste management structure. It is precisely because incineration of BMW is old technology that makes this proposal not only in breach of this Key Objective but also prejudices future developments. Key Objective K describes the need to create employment in Shropshire. This incinerator will employ few people and cannot be seen as assisting the creation of employment. In fact incineration of waste denies the opportunity for more efficient use of residual waste by re-use and repair of materials, which are labour-intensive occupations.

- iii. Effluent The three elements of discharges from this proposal are flue effluent, fly ash and bottom ash. A major defect in the design of the Veolia system is the lack of any screening of the waste entering the incinerator (it matters not what this proposal is called since an "Energy from Waste Facility" or an "Energy Recovery Facility" is still a mass-burn incinerator), so the amount of toxic material, material that would become toxic and material that would properly be recycled entering the incinerator is unknown. To assess the quality and quantity of the three effluents is to assess the toxicity after it is too late to have prevented toxic material from escaping into the environment both near and far from the incinerator. To rely on householders to ensure that no toxic material is placed inadvertently in their waste to be collected is unwise. More importantly to be unable to detect the illegal disposal of toxic waste by the unscrupulous surely makes the whole system unsafe. The flue effluent will contain large amounts of carbon dioxide adding to the carbon footprint of Shropshire and the problem of global warming. The annual figure quoted in the Greenhouse Gas Assessment is 78,000 tonnes from - presumably — 90,000 tonnes of BMW. This addition may not be great in relation to other sources of carbon dioxide, but it is additional. Other methods of re-using or managing BMW without incineration would obviously be preferable. There is the problem of extra incinerators in the West Midlands, and although each might claim to add relatively little carbon dioxide to the atmosphere, it is all extra and cumulative and avoidable. It will also contain a variable amount of toxins depending on the quality, quantity and nature of the material being combusted. However efficient the scrubbers may be in removing toxic material from the flue effluent, some will be released. This is particularly true of dioxins and furans and particulate matter especially PM10, PM2.5 and PMI and more recently nanoparticles have come under scrutiny as being a serious element in incinerator flue effluent. Without continuous analysis of the flue effluent, it will be impossible to know how much toxic material is discharged into the atmosphere. The infrequent analysis of dioxins and furans and the total ignorance of the nanoparticle discharge make nonsense of the statement that the incineration process is safe. Also the data provided does not allow an assessment of the total quantities of toxic material emitted. Although the concentrations of nitrous oxide, carbon monoxide, dioxins, furans and particulate matter and of toxic minerals such as cadmium, mercury, lead and nickel, etc. in the effluent discharge may be known and claimed to be safe, they will end up on the soil not only surrounding the area but also at surprising distances from the incinerator. The particular worry over dioxins is that they accumulate in the soil, they enter the food chain and, because they are fatsoluble, they are selectively deposited in the fat of animals. They end up in milk and meat produced in the rural area, and consumed by people who run the risk of occult disease. Premature death may not be in the short-term, so the connection with dioxins may not be made. The fly ash will contain considerable quantities of alkali used to scrub the flue effluent as well as the chemicals listed above, which will need disposal. The application form states that each year at least 3600 tonnes of flue ash and 22500 of bottom ash would be produced from an anticipated 90,000 tonnes of waste, which means that 29% of the waste will still remain for disposal. Disposal means landfill or use as hard core. Without continuous analysis of these ashes, the content of toxic material will remain undetermined. If the material is used on buildings or on roads, the contamination with toxic materials could cause serious problems for our descendants. Furthermore should a disaster happen such as a

breakdown of the scrubbing system or the combustion of a large undetected quantity of toxic waste, there would be widespread serious damage to the environment of our rural industry. Such misfortune might be uncommon or even rare, but should it happen restoration and repair could prove inordinately costly and might be impractical and even impossible. The presence of Battlefield Brook on the northern boundary of this site also presents a serious problem. Were this to be contaminated with toxic chemicals as a result of an "accident" or as a result of flooding, the consequences on the drainage system and to the river Severn could be disastrous. There is only a short reference to the problem of accidents and adverse events, and they surely present the greatest problem of all. The accident at Seveso was not predicted, but it happened. If there is no incinerator, there is no opportunity for an accident.

- iv. Alternative methods of non-recyclable waste management We are aware of several alternative methods of solving the problem of the disposal of non-recyclable waste. These options were described by the Shropshire Waste Management Partnership in its 2004 agreed policy document, and there appeared to be strong support for them in contrast to the rejection of combustion as the solution to the problem of continuing landfill. Pyrolysis and gassification processes have been used world-wide for some years and have been shown to be far more efficient than combustion in producing energy, reducing the need for landfill and the demand for fossil fuels. Veolia does not appear to have any experience of these processes, and it has dismissed them no doubt because their mass-burn system is well-established and is profitable, so why bother to seek an alternative process? These alternative processes are cheaper to build and do not need large premises and tall chimneys, because they do not produce effluent for discharge into the atmosphere. National Grid has recently issued a document (The Potential for Renewable Gas in the UK - January 2009) extolling the virtues of these alternative methods of managing non-recyclable waste and stating that as much as 50% of UK's gas consumption could be from waste management so reducing our dependence and use of fossil fuels and the carbon footprint of Shropshire. Combustion of BMW in this incinerator is a misuse of resources and does not produce as much energy as other more modern waste management processes. Here surely is an opportunity for Shropshire to lead the way in rejecting an old fashioned, out-of-date, out-moded facility and opting for a modern, more efficient and more economic facility, which would avoid environmental damage, reduce the impact on global warming, produce more energy and provide more employment.
- v. Conclusion Unless the Planning Authority decides to refuse this application, the Association will seek the referral of this planning application to the relevant Secretary of State. The proposal is in breach of stated Council policy. The Association considers that using a combustion process for the disposal of Shropshire's non recyclable waste is unacceptable, because it is inefficient and expensive, adds to the global warming problem, runs the risk of serious long-term damage to our environment and possibly to the health of our community, fails to use the most modern way of turning waste products into energy, and the building, its chimney stack and plume of smoke would constitute an unacceptable intrusion in the landscape of Shropshire. In terms of the policies listed in the SABC Local Plan, which is still relevant to this

planning application, it involves breaches of GP1 (detrimental effect on the amenities of neighbouring land users; loss of quality of the best and most versatile land; the size and scale is detrimental to the character of the area; harms the natural and historical features of local and national importance); OP2, HE3 (adverse effect on scheduled ancient monuments); LNC1 and LNC2 (protection of the natural heritage and agricultural land); INF4 (prevention of pollution); 1NF8 (development in areas at risk of flooding); INF13 (hazardous installations); and 1NF15 (adverse effect of renewable energy schemes in the open countryside and on the setting of scheduled ancient monuments).

Note – a further letter dated 10 January 2010 confirms the Town Centre Resident's Associations continuing objection to the proposals

- 8.21 Further representations dealing with the issues listed in the above sections have been received following expiry of the formal consultation deadline. A folder with a paper copy of all representations received and a non-technical summary of the application was placed on deposit in the Member's Library prior to the date of the committee meeting. The issues which are raised by objectors and the comments of planning consultees are considered in section 11 of this report.

## **9.0 PLANNING POLICY**

- 9.1 The Development Plan The Development Plan for the area in question comprises the West Midlands Regional Spatial Strategy (but see succeeding section), and the saved policies of the Shropshire and Telford & Wrekin Joint Structure Plan, the Shropshire Waste Local Plan 2002-2014 and the Shrewsbury & Atcham Borough Local Plan.
- 9.2 West Midlands Regional Spatial Strategy (Phase 1 Revision) On 6<sup>th</sup> July the Secretary of State announced the revocation of Regional Spatial Strategies. Consequently, the regional planning regime for England will no longer carry weight in terms of planning decisions. With respect to waste management the Secretary of State has advised that Local Authorities should continue to press ahead with their waste plans and data and information prepared by partners will continue to assist in this process. For the transitional period 'this will continue to be the data and information which has been collected by the local authority and industry and other public bodies who currently form the Regional Waste Technical Advisory Bodies'. This includes the waste forecast data which has been prepared in connection with the West Midlands Regional Spatial Strategy.
- 9.3 The RSS process provides a mechanism which allows existing waste management capacity to be assessed and future waste management requirements to be identified and confirmed. This in turn allows individual proposals for new waste management facilities to be assessed against relevant national guidance and strategies. It is not yet clear how an alternative system of waste forecasting would operate at a local level. However, policy officers have advised that the current RSS waste forecasts reflect the best available data on waste management requirements in Shropshire. It is further stated that the RSS housing figures for Shropshire are largely consistent with those prepared by Shropshire Council and so better reflect local household growth than in some other parts of the region. Therefore the Policy officers consider that the waste forecasts in the RSS are likely to continue to have relevance in the context of the

Battlefield EWF application. The following description of policies in the West Midlands Regional Spatial Strategy is given in this context. The RSS waste forecasts are discussed further in section 11 of this report.

9.4 West Midlands Regional Spatial Strategy (Phase 1 Revision) The current version of the West Midlands Regional Spatial Strategy (RSS – Phase 1 Revision) was published by ODPM in January 2008 and seeks to promote the creation and development of sustainable communities across the region. The RSS was due to be reviewed in two further stages, but, following the Governments announcement of the intention to abolish Regional Spatial Strategies it is expected that the RSS will not now be reviewed. Instead the development of policies for regional and sub-regional matters is expected to be delegated down to County Councils and Unitary Councils, including Shropshire. With respect to waste matters the RSS confirms the importance of continued co-ordination of waste planning at the regional level and acknowledges the net flow of household and industrial waste from the Metropolitan area to landfill in the Shire Counties and the reverse flow of special wastes. The Region is currently largely self-sufficient in terms of meeting its own needs for waste treatment and disposal. However, the interrelationship of intra regional movements of waste and the implications of the ‘proximity principle’ in PPG10 are important matters for individual Waste Disposal and Waste Planning Authorities to take into account. The RSS advises that generally, Waste Planning Authorities should seek to ensure that waste can be managed as close as possible to its point of origin. Where possible, site specific proposals for new waste management facilities should be included in development plans. The following policies cover matters which are relevant to the current proposals:

9.5 Policy WD1 sets the following regional recycling targets:

- i. to recover value from at least 40% of municipal waste by 2005; 45% by 2010 and 67% by 2015;
- ii. to recycle or compost at least 25% of household waste by 2005; 30% by 2010; and 33% by 2015; and
- iii. to reduce the proportion of industrial and commercial waste which is disposed of to landfill to at the most 85% of 1998 levels by 2005;

9.6 Policy WD2 sets regional waste management capacity targets in accordance with the National Waste Strategy. This includes the requirement regionally for additional municipal waste management facilities to recycle, compost and recover value from at least 47.9 million tonnes, and landfill capacity for approximately 40 million tonnes between 1998/9 and 2020/1. The table associated with Policy WD2 indicates what the requirements of Policy WD2 mean for the individual sub-regions of the West Midlands. For Shropshire Telford & Wrekin an annual throughput capacity of 150,000 tonnes for municipal waste recycling and composting facilities is required by 2020/1. This equates to the requirement for an equivalent of 2.5 new facilities with a capacity of 50,000 tpa, taking account of pre-existing capacity. The equivalent requirement for additional municipal waste recovery capacity in Shropshire Telford and Wrekin (through either Material Recycling or Energy from Waste facilities) is 150,000 tonnes by 2020/1.

9.7 Policy WD3 deals with the criteria for the location of waste management facilities. The policy advocates the potential advantages of small-scale waste management facilities which can be more easily integrated into the local setting, but does not rule

out applications for larger sub-regional facilities. Landfill is restricted to proposals which are necessary to meet specific local circumstances such as land reclamation.

9.8 Policy EN1 states that development plans should (i) encourage proposals for the use of amongst other matters, energy from waste, subject to impact assessment. The policy is unchanged between the adopted RSS and the Phase 2 revision. The supporting text (RSS paragraph 8.51c) makes clear that the support for EWF is for the residual waste after management options further up the waste hierarchy have been fully used.

9.9 Policy EN2 states that development plans should include measures to: i) minimise energy demands from development, redevelopment and improvement by encouraging the use of sustainable construction techniques, best practice in energy efficient design, and orientation of all building types to maximise passive solar gain; and ii) encourage the use of good quality combined heat and power systems and district heating schemes.

9.10 Other policies include:

- Policy QE1 - development standards;
- Policy QE3 - built environment;
- Policy QE5 - historic environment;
- Policy QE6 - landscape
- Policy QE9 - water quality.

9.11 The Shropshire and Telford & Wrekin Joint Structure Plan 1996-2011 (adopted November 2002) contains the following relevant saved policies:

- P16 Protecting air quality;
- P35 Minimising the impact of lorries on the community;
- P68 Ensuring proposals for new mineral and waste facilities support opportunities to minimise road vehicle movements.

9.12 The Shropshire Waste Local Plan 2002-2014 (adopted October 2004) sets out the site selection process and identifies sites for a range of waste uses. The application site is specifically identified by Policy 6 as a preferred site for an Integrated Waste Management Facility (Site ref. SA1). Policy 17 is also of particular relevance:

P17 – Energy recovery facilities will be permitted in appropriate locations where it can be demonstrated that:

- i) the proposals form an essential part of a sustainable waste management system for Shropshire;
- ii) that the proposal does not undermine the provision of waste management facilities further up the waste hierarchy and
- iii) the proposal complies with other relevant policies in the Development Plan.

There will be a presumption against the heat treatment of waste without energy recovery.

9.13 A number of other policies are also relevant to the application, including:

- P4 - considering the effects of the proposal on people and communities, natural and cultural assets, the highway network and rights of way, air soil and water resources, agricultural land and other interests of acknowledged importance;
- P5 - considering alternative means of transport to road;
- P12 - permitting Household Waste Recycling Centres in appropriate locations where this helps to achieve a network of sites accessible to local communities, forms part of an integrated network of sites contributing to Shropshire's Municipal Waste Management Strategy and complies with other plan policies;
- P25 - consideration will be given to: the need for Environmental Impact Assessment; links between planning control and other regulations; proximity to sensitive land uses and cumulative adverse effects; the potential generation of noise, vibration, odour, fumes, dust, litter, scavengers, and vermin; hours; traffic and access and scale and design in relation to location and setting;
- P27 - carrying out a traffic impact assessment if necessary.

9.14 The Shrewsbury & Atcham Borough Local Plan was adopted in June 2001. The site is in an area of the Plan allocated by policy EM1 for industrial / employment use. The policies of the Plan which are relevant to the current application are summarised below:

- GP1 requires amongst other matters the provision of appropriate infrastructure and landscaping, development of an appropriate size, scale and layout which does not detrimentally affect the townscape and character of the area, reduces harm to important natural and historical features, and seeks to prevent adverse traffic impact, incorporate measures to reduce crime;
- GP2 protects the character and setting of historic settlements, including amongst other matters ensuring that development is in sympathy with historic character.
- GP3 requires that landscaping measures are capable of minimising the impact of the development on the landscape, wildlife and historical character of the site.
- EM1 allocates areas for employment use including 5.8 hectares of land at Battlefield Enterprise Park, including the current site, subject to the criteria in policy GP1 and the provision of adequate internal parking and space for vehicles. The Local Plan states that the land is available for Class B use, and preferably B2 general industrial use for a single user. The Local Plan also allocates land for industrial use to the immediate south of Vanguard Way (6.5 hectares) and west of the site, between Battlefield Link Road and Battlefield Way (20.9 hectares).
- EM2 protection of employment land including ensuring that there is no conflict with neighbouring uses. The reasoned justification also states that certain alternative uses including sui generis employment uses may sometimes be acceptable within Class B employment land;
- HE2 protecting sites of known or suspected archaeological importance;
- HE3 planning permission will not be granted for development which would have an adverse effect on the site or setting of a scheduled ancient monument or other nationally important sites or monuments;
- HE7 planning permission will only be granted for development which preserves the setting and important views of listed buildings;
- HE13 planning permission will not be granted for development which would destroy or adversely affect the topographical authenticity, visual amenity, or archaeological integrity of the site of the battle of Shrewsbury (1403) as defined

- on the register of historic battlefields produced by English Heritage in June 1995.
- LNC1 protecting natural heritage including flora, fauna and habitats;
- LNC2 protects best and most versatile agricultural land.
- LNC8 requires the protection of statutorily protected species.
- LNC10 states that development will not be permitted which would cause the loss of or damage to existing woodlands, trees or hedgerows, unless the need for the proposed development outweighs the amenity, wildlife or historic value of the trees.
- T1 development likely to generate a significant number of trips will only be granted where amongst other matters it will not result in an unacceptable increase in traffic flows through residential/environmentally sensitive areas, is situated adjacent to and can be easily linked to primary / main routes and would not affect the operational efficiency of the primary roads;
- INF2 developers should demonstrate that the necessary services and infrastructure will be available to serve the development;
- INF4 planning permission will only be granted for potentially polluting development where it can be shown that the development will not have a detrimental impact on surrounding land uses or be likely to prejudice the use of adjacent land by virtue of pollution to air, land or water.
- INF6 development which may have an adverse effect on the quality and ecology of the water environment will not be permitted unless it can be demonstrated that adequate preventative measures will be taken to maintain the quality of the watercourse;
- INF7 Protecting groundwater
- INF8 development will not be permitted within areas potentially at risk from flooding, unless it can be demonstrated that adequate measures will be taken for flood protection and prevention;
- INF9 development will only be permitted for development which could increase the risk of flooding if the developer includes appropriate alleviation measures
- INF13 planning permission will not be granted for development involving the use, movement or storage of hazardous substances where there would be an additional risk to the health and safety of users of the site, neighbouring land or the environment;
- INF18 & 19 encouraging the provision and protection of community facilities

#### EMERGING PLANNING POLICIES:

- 9.15 Local Development Framework (LDF) Document The new system of development plans involves the replacement of existing regional guidance, Structure Plans and Local Plans with Regional Spatial Strategies (but see 8.2 above) and Local Development Frameworks (LDFs). Shropshire Council has published the Final Plan version of the Core Strategy which will form a central element of the LDF. The Core Strategy Development Plan Document (DPD) sets out strategic planning policies for Shropshire. It also sets out a development strategy which identifies the level of development expected to take place within Shropshire up until 2026 and a number of Core Policies which will help to achieve the vision. All subsequent LDF documents produced including the Site Allocations Document (incorporating waste allocations) and subsequent Supplementary Planning Guidance will build upon the Core Strategy. However, during the current transitional period, saved policies from existing adopted plans will continue to form the Development Plan.

9.16i. The emerging Shropshire Core Strategy sets out a Spatial Vision for Shropshire in 2026. There are 12 strategic objectives:

1. Support the development of sustainable communities;
2. Develop the roles of Shrewsbury as a sub-regional centre, and Shropshire's market towns and key centres;
3. Rebalance rural communities through the delivery of local housing and employment opportunities;
4. Provide and maintain a sufficient and appropriate supply of housing land;
5. Provide for a mix of good quality, sustainable housing development;
6. Promote sustainable economic development and growth;
7. Support the development of sustainable tourism, rural enterprise, broadband connectivity, diversification of the rural economy, and the continued importance of farming and agriculture;
8. Support the improvement of Shropshire's transport system;
9. Promote a low carbon Shropshire;
10. Promote high quality sustainable design and construction;
11. Ensure that the character, quality and diversity of Shropshire's built, natural and historic environment is protected, enhanced and, where possible, restored;
12. Improve the quantity, quality and accessibility of multifunctional open space, rights of way, and sport, recreation and cultural facilities.

The site of the Battle of Shrewsbury is identified as a Spatial Area Characteristic of the central area of Shropshire.

ii. Policy CS19 of the emerging Core Strategy deals with Waste Management Infrastructure:

**CS19:** Sustainable waste management facilities and services will help to deliver greater resource efficiency for communities and businesses. This will be achieved by:

- 1) Encouraging proposals for additional capacity to divert waste away from landfill in a way consistent with the waste hierarchy and the principles and targets of national, regional and local policies and strategies, including the principle of 'equivalent self sufficiency' and an allowance for cross boundary waste flows;
- 2) Identifying specific sites to deliver additional waste transfer, recycling and recovery facilities in accessible locations close to the main urban areas within the broad locations identified in Figure 9 as part of the Site Allocations and Management of Development DPD.

Outside these broad locations, Shropshire Council will support applications for smaller scale waste facilities capable of meeting local needs in locations which are consistent with the principles and site identification criteria set out in national and regional policy;

- Supporting the co-location of waste facilities and the integration of new waste facilities or space in the design of new development.
- Requiring applications for all types of development to include information about the management of waste during their construction and subsequent

operation as part of the completion of the sustainability checklist required by Policy CS6;

- Ensuring that the continued operation of existing waste management facilities in locations which are consistent with the site identification criteria for new sites is safeguarded, including against the encroachment of incompatible uses, in a way consistent with Policy CS8 and national and regional guidance.

ii. Other emerging policies of relevance to the current proposals include:

- Policy CS2 Shrewsbury – Development Strategy
- Policy CS6: Sustainable Design and Development Principles
- Policy CS7: Communications and Transport
- Policy CS9: infrastructure contributions
- Policy CS16: Tourism, Culture and Leisure
- Policy CS17: Environmental Networks
- Policy CS18: Sustainable Water Management

#### PLANNING POLICY GUIDANCE:

9.17 Planning Guidance: In addition to the above Plans there is Central Government Guidance of relevance to the consideration of waste proposals.

9.18 Planning Policy Statement 10 (Planning for Sustainable Waste Management - 2005) aims to protect human health and the environment by producing less waste and by using it as a resource wherever possible. More sustainable waste management is advocated, moving the management of waste up the 'waste hierarchy' of reduction, reuse, recycling and composting, using waste as a source of energy, and only disposing to landfill as a last resort. The Government aims to break the link between economic growth and the environmental impact of waste. Regional planning bodies and all planning authorities should, to the extent appropriate to their responsibilities, prepare and deliver planning strategies that:

- help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be adequately catered for;
- provide a framework in which communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet the needs of their communities;
- help implement the national waste strategy, and supporting targets, are consistent with obligations required under European legislation and support and complement other guidance and legal controls such as those set out in the Waste Management Licensing Regulations 1994;
- help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations;
- reflect the concerns and interests of communities, the needs of waste collection authorities, waste disposal authorities and business, and encourage competitiveness;
- protect green belts but recognise the particular locational needs of some types of waste management facilities when defining detailed green belt boundaries

and, in determining planning applications, that these locational needs, together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission;

- ensure the design and layout of new development supports sustainable waste management.

Amongst other matters the following decision making principles should apply:

- planning authorities should prepare local development documents that reflect their contribution to delivering the RSS;
- waste management should be considered alongside other spatial planning concerns, such as transport, housing, economic growth and natural resources;
- the planned provision of new capacity and its spatial distribution should be based on clear policy objectives, robust analysis of available data and information, and an appraisal of options.;
- sustainability appraisal (incorporating strategic environmental assessment) should be applied;
- indicators should be monitored and reported on and waste planning authorities should periodically review and roll forward their waste planning strategies to avoid under-provision of waste management capacity or over-provision of disposal options to ensure movement up the waste hierarchy is not undermined.

9.19 Planning Policy Statement 23 (Planning and Pollution Control - 2004) provides advice on how planning relates to the role of other agencies involved in pollution control. PPS23 recognises that planning has a key role to play in protecting the environment, the close relationship between the planning system and the pollution control framework and the need to avoid duplication between these systems.

9.20 In addition to PPS10 and PPS 23 other Government planning policy statements and guidance of relevance to the current application includes:

- Planning Policy Statement 1: Delivering Sustainable Development
- Planning Policy Statement: Planning and Climate Change - Supplement to Planning Policy Statement 1
- Planning Policy Statement 3: Housing
- Planning Policy Statement 4: Planning for Sustainable Economic Growth
- Planning Policy Statement 5: Planning for the Historic Environment
- Planning Policy Statement 9: Biodiversity and Geological Conservation
- Planning Policy Statement 10: Planning for Sustainable Waste Management
- Planning Policy Statement 11: Regional Spatial Strategies
- Planning Policy Statement 12: Local Spatial Planning
- Planning Policy Statement 22: Renewable Energy
- Planning Policy Statement 23: Planning and Pollution Control
- Planning Policy Statement 25: Development and Flood Risk
- PPG4: Industrial, commercial development and small firms
- PPG13: Transport
- PPG24: Planning and noise

OTHER PLANS, STRATEGIES AND CONSIDERATIONS:

9.21 West Midlands Regional Spatial Strategy - Phase 2 Revision (December 2007). Prior to the new Secretary of State's announcement of the intention to abolish Regional Spatial Strategies (see 9.2) work had been underway to review the current RSS for the West Midlands. The Phase 2 revision process had reached a relatively advanced stage. The work done on the Phase 2 Revision remains relevant to the current proposal because the waste forecasts (draft policies W2 and W3) are based on up-to-date evidence prepared by the West Midlands Regional Technical Advisory Board. Draft policies of relevance include:

- Policy W1 states that Waste Planning Authorities in their LDDs should have regard to the following principles:
  - i. delivering sustainable development through application of the over-arching RSS Policies SR1 to SR4;
  - ii. seeking to ensure that the West Midlands becomes and remains a zero waste growth region;
  - iii. promoting waste management up the waste hierarchy by maximising the reduction, re-use, recycling, composting and energy recovery and as a last resort disposal;
  - iv. regarding waste as a resource;
  - v. adopting the "equivalent self-sufficiency" approach for each WPA in the region

The supporting text advises that the quantity of waste should be minimized in accordance with the waste hierarchy before options for recovering energy from the residual material are pursued.

- Policy W2 requires each WPA, or sub-region to plan for a minimum provision of new facilities for given tonnages, at sites distributed across their areas. The associated tables update the predictions of treatment requirements included in the current RSS, taking account of the most recent waste forecasts, trends and factors such as the increase in landfill tax. The implications of this are discussed in section 10 of this report.
- Policy W3 states that new or enhanced facilities that will be required by authorities that currently have a 'treatment gap' in facilities to manage waste. Large settlements including Shrewsbury are identified as well placed to accommodate facilities of a regional or sub-regional scale to reprocess, re-use, recycle or recover value from waste.
- Policy W4 relates to the safeguarding of existing waste management sites.
- Policy W5 specifies the criteria for location of new waste management facilities. This includes the requirement for a range of sites of different size and distribution, good accessibility to the waste source and/or end users and good transport connections. Industrial land is listed as one of the types of land to be considered for waste management, provided environmental and amenity criteria can be met.
- Policy W11 places restrictions on the granting of planning permission for new landfill sites.

9.22 The revised Waste Framework Directive (Directive 2008/98/EC - 19 November 2008) defines "waste" throughout the EU and provides the overarching legislative framework for the collection, transport, recovery and disposal of waste. Article 4 of the Directive requires that the following hierarchy ("the waste hierarchy") shall apply as a

priority order in waste prevention and management legislation and policy:

- a) Prevention
- b) Preparing for re-use
- c) Recycling
- d) Other recovery, eg. energy recovery; and
- e) Disposal

Article 4 allows for specific waste streams to depart from the hierarchy where this is justified by life-cycle thinking on the overall impacts of the generation and management of such waste.

Article 11(2) of the revised WFD sets targets for Member States to achieve:

- a) By 2020 a minimum of 50% by weight of waste materials such as at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be prepared for re-use<sup>17</sup> or recycled and
- b) By 2020 a minimum of 70% by weight of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 0418 in the list of waste shall be prepared for re-use, recycled or recovered.

Member States are required to transpose the revised WFD by 12<sup>th</sup> December 2010.

9.23 The Landfill Directive (1999/31/EC) standardises the engineering, operation and regulation of all landfill sites and sets targets for the diversion of municipal solid waste from landfill. The following targets apply to the UK for reduction of municipal solid waste landfilling:

- 75% of the 1995 amount by 2010
- 50% of the 1995 amount by 2013
- 35% of the 1995 amount by 2020

The Directive also bans certain types of waste completely from landfill (e.g. liquids, clinical wastes, tyres) and there are requirements for pre-treatment. The provisions of the Directive are implemented in England and Wales by the Environmental Permitting (England and Wales) Regulations 2007 and the Waste and Emissions Trading Act 2003. A Pollution Prevention and Control permit will be required for the current proposals under the above regulations.

9.24 The National Waste Strategy The government has set out targets in the National Waste Strategy 2000 to recycle or compost at least 25% of household waste by 2005 and 33% by 2015. The Waste Strategy for England 2007 builds on this by seeking to break the link between economic growth and waste growth and acknowledging the important role which sustainable waste management can have in addressing the effects of climate change. The Strategy promotes energy recovery technologies so that unavoidable residual waste is treated in the way which provides the greatest benefits for energy policy. New targets exceeding those of the Landfill Directive are identified. This includes a 29% reduction in the amount of household waste not re-used, recycled or composted between 2000 and 2010, progressing to a 45% reduction on 2000 levels by 2020. Higher national targets than in 2000 have also been set for recycling and composting of household waste (at least 40% by 2010,

45% by 2015 and 50% by 2020) and for recovery of municipal waste (53% by 2010, 67% by 2015 and 75% by 2020). The 2007 strategy notes that the landfill tax escalator (increasing by £8 per year per tonne from 2008 until 2010/11) and the Landfill Allowance Trading Scheme (LATS) have created sharp incentives to divert waste from landfill. Additional funding for local authorities has also led to a major increase in kerbside recycling facilities and new waste management facilities.

9.25 The UK Renewable Energy Strategy (July 2009) implements the EU Renewable Energy Directive which includes a legally binding UK target of 15% of energy from renewables by 2020 (a seven-fold increase from 2008 levels). The government states that this will assist in addressing climate change and security of energy supply whilst creating up to half a million jobs in the renewable energy sector by 2020. The strategy advocates the following targets:

- ⇒ More than 30% of our electricity generated from renewables, (up from about 5.5% today).
- ⇒ 12% of our heat generated from renewables, (from very low levels today).
- ⇒ 10% of transport energy from renewables, (current level of 2.6%)

9.26 The UK Low Carbon Transition Plan (July 2009) aims to deliver emission cuts of 18% on 2008 levels by 2020. This will be achieved amongst other matters by getting 40% of our electricity from low carbon sources by 2020 (30% from renewables) and by substantially increasing the requirement for electricity suppliers to sell renewable electricity. The plan also sets out measures to promote greener homes and industries. The Government has put in place a legally binding target to cut emissions 80% by 2050 and a set of five-year “carbon budgets” to 2022 to keep the UK on track.

Other waste management considerations:

9.27 The Shropshire Municipal Waste Management Strategy 2000-2020 was published in April 2002 and has been reviewed twice since this time (in 2004/5 and 2008/9). The Strategy was initially prepared through Shropshire’s Joint Waste Management Advisory Committee on behalf of the former local authorities who were replaced by Shropshire Council in April 2009. The Joint MWM Strategy sets out the objectives and proposals for waste collection, treatment and disposal that will apply across the county and the options for meeting performance standards and targets. The Strategy addresses partnership working, including with other bodies and stakeholders. It is recognized that external funding will be an integral part of resource requirements in order to meet and surpass the challenging targets identified by the Strategy. The strategic objectives of the original strategy were:

Short term (until 2005/6)

- ⇒ Introduction of collection of dry recyclables from the kerbside
- ⇒ A materials recycling facility would be required to sort and process the mixed dry recyclables
- ⇒ Some recycling would still take place via the existing bring banks
- ⇒ Composting of green waste segregated at the household waste recycling centres
- ⇒ Residual waste, that is waste not recycled or composted, would be disposed to landfill.

### Medium term (until 2010)

- ⇒ Building on the above, a kerbside collection of organic waste would be established
- ⇒ This waste would require processing in an in-vessel composting facility
- ⇒ Residual waste would continue to be disposed to landfill

### Long term (until 2020)

- ⇒ To reduce reliance on landfill, a thermal treatment facility could be developed to treat the residual waste

Specific targets identified by the original strategy are:

- ⇒ To develop new collection and disposal contract arrangements for all Shropshire authorities by 2009;
- ⇒ To recover of 45% of municipal solid waste by 2010;
- ⇒ To reduce municipal waste landfilling to 75% of 1995 levels by 2010;
- ⇒ To reduce BMW to landfill to 50% of 1995 levels by 2013 and reduce further to 35% of 1995 levels by 2020
- ⇒ To increase green waste processing capacity up to 42,000 tpa by 2020
- ⇒ To increase material recycling facility capacity up to 40,000 tpa by 2020

9.28 The Landfill Allowance Trading Scheme (LATS) came into force in April 2005 and implements the requirements of the 2003 Waste and Emissions Trading Act (WET) to help the UK meet its Landfill Directive targets. Each Local Authority is allocated a tonnage allowance for the amount of municipal solid waste it can send to landfill which reduces year-on-year until 2020. Authorities in England including Shropshire can trade their allowances with other authorities, 'bank' them for future years, or 'borrow' up to five per cent of their future allowances for earlier use. Local Authorities who exceed their given allowances for landfilling municipal solid waste receive substantial financial penalties.

9.29 Future waste policy: The House of Commons Environment, Food and Rural Affairs Committee published a report on the Waste Strategy for England 2007 on 6 January 2010. The report makes a number of recommendations which suggests the possible future direction of national policy guidance on waste management, including:

- ⇒ the recycling targets in the Waste Strategy for England should be increased to 50% recycling of household waste by 2015 and 60% by 2020.
- ⇒ Local authorities need to reinforce public support for recycling by explaining exactly how much it costs to collect and dispose of each bagful, or wheelie bin load, of waste, and give people more information on what happens to materials they put out for recycling.
- ⇒ Defra needs to be more supportive of local authorities' work to help residents manage their waste, in particular it should explain how it will introduce a more rational regime for charging for domestic waste.

- ⇒ Waste should only be used for energy recovery if it is not possible to re-use, recycle or compost it;
- ⇒ To achieve maximum energy efficiency levels, planning consent for energy from waste plants must require heat to be captured and used;
- ⇒ The role of Private Finance Initiatives in funding infrastructure development must be reviewed since it can restrict local authorities' ability to respond to changes in technologies and waste collection systems.
- ⇒ The Government should address delays in the planning system for new facilities and extend the escalator for landfill tax levels to 2020 to give certainty to those investing in long-term projects. DEFRA must ensure that enforcement of waste regulation is fully funded.

9.30 In March 2010 DEFRA and the Welsh Office published a document entitled a consultation on the introduction of restrictions on the landfilling of certain wastes. The document considers the potential to ban specific waste types from landfill in order to reduce greenhouse gas and promote recycling. Candidate waste types considered in the document include paper/card, food, textiles, metals, wood, green (garden) waste, plastics, electrical goods and biodegradable wastes.

## **10. THE MAIN PLANNING ISSUES**

10.1 The main issues to consider are:

- i) Is the proposal in accordance with the Development Plan and, if not, are there material considerations which would justify departure from the policies of the Development Plan?
- ii) Does the Environmental Statement contain sufficient information to allow the effects of the proposed development to be adequately assessed, including with reference to the following issues? :
  - Site allocation and departure issues;
  - Justification for EWF – would the proposed facility be capable of forming part of a sustainable waste management system for Shropshire having regard to:
    - relevant national, regional and local considerations;
    - principles such as regional self sufficiency and the proximity principle;
    - waste forecasts and capacity issues including the effect on waste recycling rates?
  - Ash management and recycling procedures;
  - Consideration of alternative technologies and sites;
  - Wider environmental issues including climate change, energy efficiency and carbon footprint;
  - Environmental and amenity considerations including:
    - Landscape and visual effects;
    - Traffic and transport including local highway and internal circulation;
    - Air quality including abatement, plume dispersion, ash and dust;
    - Health and amenity including human health, noise, pests, litter, wind and hours of operation;
    - Natural heritage including protected sites and species (see iii below);
    - Hydrology and drainage;
    - Pollution;

- Ecology;
- Community and social;
- Cumulative and combined impacts;
- Other issues including fire safety and excavated material;
- Prematurity in relation to emerging development plan policies.

iii) Do the proposals comply with the requirements of the Habitats Regulations?

## 11.0 OFFICER APPRAISAL

### PLANNING POLICY CONTEXT

11.1 The Development Plan Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that determination must be made in accordance with the plan unless material considerations indicate otherwise. The relevant parts of the Development Plan for the purposes of the current application are the saved policies of Shropshire Waste Local Plan, the Shrewsbury and Atcham Borough Local Plan and the Shropshire Structure Plan. The government has confirmed that Regional Spatial Strategies have been abolished. However, the waste forecasts included in the West Midlands RSS which form the basis of RSS policies W1 and W2 are based on up to date information with respect to waste management requirements in Shropshire. Accordingly, it is considered that these forecasts provide relevant guidance and background for the current application.

11.2 The Shropshire Waste Local Plan (2002-2014) provides specific guidance on individual waste management issues in Shropshire. The Plan (WLP) dating from 2004 is a saved document and remains substantially in accordance with more recent policies and guidance including PPS10. The WLP advises that very little landfill void space is now available in Shropshire for disposal of residual municipal waste. Consequently there is an urgent need to provide strategic waste management facilities which contribute to diverting waste from landfill. Policies 6 and 17 of the WLP are of particular relevance to the current proposals.

- Policy 6 (preferred sites for waste transfer and recovery facilities) allocates specific sites for the carrying out of waste management and recovery operations and sets out (in the accompanying site profiles) the main land use considerations which will apply for each allocated site.
- Policy 17 (energy recovery facilities) lists the criteria which will be used in order to assess proposals for energy recovery facilities (including EWF). These policies also refer to the need to comply with other relevant policies in the Development Plan.

Other relevant Waste Local Plan policies include:

- Policy 4 (protecting Shropshire's environment and communities);
- Policy 10 (co-location);
- Policy 25 (development control considerations)
- Policy 27 (transport assessment)

11.3 Site allocation and departure issues The Waste Local Plan identifies the application site (in Policy 6) as a strategic location for an integrated municipal waste

management site which would be capable of acting as a central point dealing with Shropshire's municipal waste. The site is located on a modern business park comprising a mixture of uses with good road access, at the geographic centre of the county's waste collection network. It has acted as a central hub for the county's municipal waste management infrastructure since phase 1 of the facility opened in 2004. However, the site profile accompanying Policy 6 of the Waste Local Plan excludes 'mass burn incineration'. Notwithstanding this, the applicant has concluded that incineration linked to energy recovery is the most appropriate way of fulfilling the need for municipal waste recovery capacity in Shropshire and has therefore put forward the current proposals. The application was initially advertised as a technical departure which was not in full conformity with the Waste Local Plan (but see 11.7 below). The following can be said with regard to departure issues:

11.4 The reasoned justification accompanying Policy 17 of the WLP advises that:

'incineration technology, whilst it is a proven form of waste management, generally requires a consistent, high volume source of waste. The design of incinerators is characterised by large industrial buildings with a large chimney stack. In recent years, alternative forms of energy recovery technology have been proposed in the UK, based on pyrolysis and gasification processes. Whilst not yet proven in the UK, such plants have the potential to offer much smaller scale facilities which include opportunities to recover additional materials for recycling. In Shropshire, preference will be given to these alternative energy recovery technologies...'(WLP 6.87).

The WLP when published in 2004 expressed a preference for alternative forms of energy recovery but acknowledged that such technology is not yet proven in the UK. However, more recent guidance in PPS10 advises (in 7.25) that whilst all sites and areas allocated for waste management should be suitable for their intended use "care should be taken to avoid unnecessary prescription, particularly where this could stifle innovation in line with the waste hierarchy.

11.5 PPS10 acknowledges (in 7.29) 'that the search for sites for waste management has traditionally focused on opportunities for landfill and, or, on existing waste management facilities. However, waste management needs are changing and most waste management activities are now suitable for industrial locations. This is particularly the case given the increased move towards enclosing waste management activities in purpose-designed buildings'. The principal focus of Policy 6 of the Waste Local Plan is to identify sites which are potentially suitable for waste management development. The waste management processes which the Site Profile lists are intended to be indicative rather than prescriptive in line with the advice in PPS10. It is recognised that the design of waste management facilities can evolve over time. At the time of preparation of the Waste Local Plan mass burn incinerator and energy from waste proposals commonly involved throughputs in excess of 250,000 tonnes per annum. A facility with this level of throughput would have also necessitated importation of waste from wider sources outside Shropshire as opposed to the Shropshire-specific facility envisaged by the Waste Local Plan, in conflict with the proximity principle. However, application of EWF technology has progressed in the past 5-6 years and facilities with smaller throughputs such as the current proposals have become increasingly feasible.

11.6 The applicant states that in addition to its reduced size, the current facility would

generate energy from the combustion process and that the scale of the proposed building is reduced relative to a typical mass burn incinerator. It is recognised that the EWF process requires buildings and associated chimneys which are generally large by the scale of industrial estate buildings. Most new schemes involving the mass burning of municipal waste also now involve generation of electricity. However, the smaller throughput and scale of the proposed facility relative to other EFW facilities is acknowledged. It is also acknowledged that the proposals are in general accordance with the Municipal Waste Strategy for Shropshire which emphasizes separation at source with longer term provision for thermal treatment of residual wastes.

11.7 In summary, whilst the site is allocated for waste management purposes the current EWF proposals differ from the specific waste management processes listed in the relevant site profile of the Waste Local Plan. However, it is considered that they represent a practicable waste management solution which could potentially be acceptable on balance in relation to current national, regional and local waste policies and guidance. This is having regard to the site's designation as a strategic central hub for waste management in Shropshire. Relevant planning case law establishes that where a development proposal does not comply with a specific element of the development plan but is in general compliance with the overall requirements of the plan then the proposals may not constitute a departure for the purposes of Section 38(6) of the Planning and Compulsory Purchase Act 2004. It is necessary to consider the following issues in order to establish the extent to which the current proposals can be seen as a formal departure from the development plan:

- 1) The extent to which addition of the current EWF proposal to the existing waste management network can be accepted in relation to individual development plan policies and local considerations as understood in the context of relevant guidance including the key waste management principles set out in PPS10.
- 2) The extent to which the proposals comply overall with the policies of the development plan.

These issues are considered in subsequent sections of this report.

#### JUSTIFICATION FOR EWF

11.8 Notwithstanding the site's allocation in the Shropshire Waste Local Plan, objectors have questioned the appropriateness of energy from waste as a waste management process and have advocated alternative waste management solutions. They claim that alternatives such as pyrolysis and gasification would potentially offer greater environmental benefits (such as facilitating increased recycling) and would be associated with reduced environmental impacts relative to EWF. The applicant has however stated that the proposed EWF would form part of an integral part of a waste management system which seeks to maximise opportunities for recycling and re-use before final disposal of residual wastes in accordance with Waste Local Plan Policy 17. The justification for EWF as part of a sustainable waste management system for Shropshire is considered in succeeding sections.

11.9 Justification for EWF – National and European context. The Landfill Directive (1999/31/EC) requires member states to meet targets which require a staged reduction in the amount of biodegradable waste disposed to landfill. This includes a 25% reduction in the quantity of waste landfilled relative to 1995 levels by 2010 with

subsequent reductions to 50% by 2013 and 65% by 2020. In 'Waste Strategy 2000' the Government set out the corresponding increases in recycling and composting levels which would be required in order to achieve this reduction in landfilling. The subsequent Waste Strategy 2007 updates these targets, seeking to reduce the amount of household waste not re-used, recycled or composted by 29% in 2010 relative to the level in 2000 with an aspiration to reduce landfilling by 45% in 2020 relative to the 2000 level. Higher national targets have been set than in 2000. This includes targets to recover value from at least 53% of municipal waste by 2010; 67% by 2015; and 75% by 2020. The 2007 Strategy also identifies targets to recycle or compost at least 40% of household waste by 2010; 45% by 2015; and 50% by 2020. To assist in meeting the requirements of the Waste Strategy the government has imposed annual increases in the cost of landfill tax (by £8 per year from 2008 until at least 2010/2011 - currently £48 per tonne) under the Landfill Tax Escalator. Financial penalties also apply if Local Authorities exceed their allowance for landfilling under the Landfill Allowance Trading Scheme (LATS).

- 11.10 Shropshire currently exceeds the relevant National Waste Strategy 2007 target, recycling or composting approximately 46% of all municipal waste collected. This has been achieved through implementation of waste recycling initiatives including the kerbside collection scheme and improvements to the layout of the county's Civic Amenity sites. The County does not yet recover value from the 'black bag' municipal waste which remains after householders have separated materials at source through the kerbside scheme (i.e. by recovering energy through EFW). At present, this residual waste is bulked up at the county's waste transfer stations including Battlefield and transported to landfill sites outside Shropshire for final disposal. However, as noted above, this means of disposal is becoming increasingly expensive. An alternative final disposal option for residual municipal waste is therefore required. The proposed EWF would facilitate this, and would avoid the need for future landfilling of municipal waste (except possibly some ash residue from the EWF process).
- 11.11 Justification for EWF - Regional context. The government has announced the revocation of Regional Spatial Strategies. In the longer term the legal basis for Regional Strategies will be abolished as part of the Localism Bill that is being introduced to the current parliamentary session. In determining planning applications local planning authorities must continue to have regard to the development plan and other material considerations including national policy. Evidence that informed the preparation of the revoked Regional Strategies may also be a material consideration, depending on the facts of the case. In terms of the establishment of need for waste management facilities without Regional Strategy targets, Government advice is that planning authorities should continue to press ahead with their waste plans to support the sustainable management of waste (including the move away from disposal of waste by landfill) and data and information prepared by partners will continue to assist in this process. For the transitional period this will continue to be the data which has been by the local authority, industry and other public bodies who currently form the Regional Waste Technical Advisory Bodies. In due course the government intends for this function to be transferred to Local Authorities as part of the Localism Bill. However, the waste capacity forecasts for Shropshire which are included in the RSS are based on up to date information and it is considered that they remain valid for the current application.
- 11.12 Both the original RSS and the Phase 2 RSS revision identify the need for a facility or facilities to deal with Shropshire's residual municipal solid waste. For the Shropshire,

Telford & Wrekin sub-region the RSS predicts that there will be a need for facilities with sufficient capacity to manage 300,005 tonnes of municipal waste per annum by 2020/21. This is subdivided into a requirement for 150,000t of composting/recycling capacity and 155,000t of waste recovery capacity (through facilities such as Energy from Waste). Allowing for pre-existing capacity this leaves a requirement for 136,000 of new recycling / composting capacity and 155,000t of recovery capacity in Shropshire Telford & Wrekin by 2020/21. At 90,000 tonnes per annum the current proposals would be capable of securing a significant proportion of the recovery capacity which the current RSS states will be required for the subregion.

- 11.13 The Phase 2 RSS rolls the predictions in the current RSS forward by 5 years to 2025/26. For the region as a whole it is predicted that by 2025/6 the amount of municipal waste being landfilled will need to reduce by nearly half (to 709,731t) and the amount of municipal waste diverted from landfill will need to almost double (to 3,156,001t) if recycling and landfill diversion targets are to be met. Separate figures are provided for Shropshire and Telford & Wrekin and equivalent predictions on the required treatment capacity for commercial and industrial waste are also provided (see table 1). For Shropshire, the total amount of waste predicted to require diversion from landfill by 2025/6 is 627,000 tonnes. This is subdivided into 217,000t of municipal waste and 410,000t of commercial and industrial waste (see table 1). The RSS Phase 2 states that the required diversion of municipal waste from landfill is likely to be met in Shropshire by an equal mixture of composting / recycling and waste recovery sites (i.e. including technologies such as EWF). This would equate to a requirement for 108,500 tonnes of recovery capacity by 2025/6. The RSS Phase 2 also predicts that the amount of municipal waste requiring diversion from landfill will rise steeply at a relatively early stage. The Regional Technical Advisory Board has commissioned research which compares the treatment forecasts in the RSS Phase 2 with current actual and planned capacity. This identifies significant ‘treatment gaps’ for a number of West Midlands authorities. A ‘treatment gap’ of 150,000 tonnes is predicted for Shropshire by 2025/6. The equivalent ‘treatment gap’ for Telford & Wrekin by 2025/6 is estimated to be 490,000t. Phase 2 revision policy W3 states that authorities with treatment gaps should make provision in their LDDs for suitable new or enhanced waste management facilities.

**Minimum diversion of waste from landfill in Shropshire to 2026** (from Draft RSS Phase 2)

<b>Table 1</b>	<b>2005/6</b>	<b>2010/1</b>	<b>2015/6</b>	<b>2020/1</b>	<b>2025/6</b>
Min municipal waste diversion from landfill	60,000t (118,000t)*	109,000t (85,000t)	194,000t (10,000t)	206,000t (10,000t)	217,000t (10,000t)
Min commercial & industrial diversion from landfill	211,000t (153,000t)	241,000t (129,000t)	300,000t (128,000t)	410,000t (137,000t)	410,000t (137,000t)
Total diversion from landfill (mun + C&I)	271,000t	350,000t	484,000t	616,000t	627,000t

\*(brackets denote assumed maximum rate of landfilling)

- 11.14 The RSS waste forecasts anticipate that for Shropshire, approximately half the required municipal waste treatment capacity is likely to be provided by recycling and composting facilities, with the remainder being met by recovery facilities catering for the final disposal of residual waste (i.e. EWF). This is considered to be a reasonable assumption based on existing waste trends. Shropshire already exceeds the 45% recycling target set by Waste Strategy 2007 for 2020. The applicant’s waste management contract sets a minimum recycling target of 52.5% by the end of the contract period. However, the applicant has stated that reclamation of residual recyclable materials becomes increasingly difficult as recycling levels increase above

50% (see 'Alternative Technologies' - sections 10.38 - 10.40). The applicant therefore advocates recovery through EWF as a more practicable and cost-effective solution for management of residual municipal waste, after readily recyclable materials have been removed at source. Alternative waste management options are considered further in a succeeding section. However, it is accepted the regional waste forecasts included in the RSS offer strong support for a recovery facility in Shropshire in order to close the identified treatment gap for municipal waste.

11.15 Justification for EWF - Shropshire context The Shropshire Waste Local Plan (adopted 2004) notes that the existing pattern of waste management in Shropshire is heavily dependent on waste disposal to landfill sites. The Plan accepts the benefits of moving away from landfilling, stating that relatively little waste is being recycled or recovered locally and that this existing pattern has to change quickly to take account of the requirements of legislative changes and national waste management targets. The Plan adds that 'significant additional capacity is needed immediately to recycle and recover value from waste' and would 'be needed soon to dispose of waste generated in the Plan area'. The Waste Local Plan provides forecasts of levels of waste generation in Shropshire for the period between 2002 and 2014. This identifies the relative quantities of the different waste streams anticipated and predicts how each stream will be managed within the forecast period. Of the total forecast level of 2.66 million tonnes of municipal waste generated within this 12 year period the Plan predicts that 1.1 million tonnes will be processed through recycling (0.7mt) or recovery (0.4mt) with the remainder being landfilled. The forecast assumes that a municipal waste recovery facility or facilities would become operational later in the forecast period, in line with the Shropshire Municipal Waste Management Strategy. The Waste Local Plan also forecasts high levels of recycling and recovery for construction and demolition waste and predicts that recycling for Commercial and Industrial waste will approach 40%. However, there will be low levels of recovery for this waste stream, hence a substantial residue is still likely to require landfilling.

**Forecast Waste Generation and Management in Shropshire 2002 – 2014\***  
(from Shropshire Waste Local Plan - Table 3.6)

<b>Table 2</b>	<b>Municipal</b>	<b>Commercial &amp; Industrial</b>	<b>Construction &amp; Demolition</b>	<b>Hazardous</b>	<b>TOTAL</b>
Forecast Waste Generation	2,657,000	4,654,000	6,413,000	104,000	13,828,000
Retained for Management in Shropshire	2,609,000	4,079,000	6,413,000	34,000	13,135,000
Recycled	704,000	1,891,000	3,181,000	16,000	5,793,000
Recovered	407,000	94,000	2,937,000	12,000	3,450,000
Landfilled	1,497,000	2,095,000	295,000	7,000	3,893,000

\*All figures are rounded to the nearest '000 tonnes

11.16 If the proposed EWF facility becomes operational then the proportion of municipal waste requiring landfilling would reduce substantially after the anticipated commissioning date (2013) and the level of municipal waste recovery would show a corresponding increase. If the proposed facility does not become operational and no alternative recovery proposals are implemented then the table suggests that high levels of landfilling are likely to be required for the foreseeable future. This would

conflict with national waste management objectives including the Waste Strategy 2007. It is concluded that, like the waste forecasts in the RSS, the Shropshire Waste Local Plan also provides strong support for a municipal waste recovery facility in order to manage residual municipal waste after recycling reductions are applied.

11.17 Justification for EWF – Interim conclusion Relevant policies, forecasts and guidance indicate a strong general need for a waste facility to manage Shropshire’s residual municipal waste. The proposed EWF would be capable of meeting this need. The site is identified in the Waste Local Plan and equivalent quantities of waste are already being imported to the existing waste transfer building which became operational in 2006. Also, as noted in subsequent sections of this report, the site has good transport connections to the primary road network, is at the geographic centre of Shropshire’s municipal waste management network (proximity principle) and is located on a modern business park, some distance from the nearest residential properties. The proposed EWF would allow local responsibility to be assumed over the disposal of municipal waste generated in Shropshire, without the need to rely on out of county landfilling. It is also necessary however to assess whether the proposed EWF would be an appropriate process for the site and would form part of a sustainable waste management network which maximises recycling and re-use before final disposal of residual waste.

11.18 Justification for EWF - capacity The Waste Local Plan states that “If waste management development were to be permitted in excess of local need, it could encourage the importation of waste over longer distances, contrary to the proximity principle and discourage the development of local options closer to where the waste is generated” (WLP section 6.14). Objectors have questioned the need for the proposed facility on the following grounds:

- It is suggested that Veolia’s minimum recycling target of 52.5% is not sufficiently ambitious, given that levels of municipal waste recycling in Shropshire are already at 46%. It is claimed that a number of other English local authorities are already recycling in excess of 60% of their municipal waste and that there is greater scope to recycle municipal waste in Shropshire than is assumed by the applicant.
- It is suggested that the proposed EWF may need to import substantial quantities of waste from private commercial and industrial sources in order to operate efficiently.
- The reliability of the forecasts on which the capacity of the proposed facility is based has been questioned. It is claimed that the recent depressed economy has resulted in decreased levels of waste generation relative to predicted levels. It is suggested that current reduced levels of economic activity and associated reduced waste levels may not continue in the future.
- It is suggested that a number of existing operational EWF plants are struggling to source the amounts of material required for efficient operation in the context of increased efficiencies in waste recycling.
- It is suggested that new technologies and changes in waste management practice have the potential to increase recycling significantly above the levels assumed by the applicant.

11.19 The applicant has provided more evidence to support the conclusion that the proposed EWF would form an essential element of a sustainable and integrated waste management system for Shropshire, taking account of the likely effect of

planned future recycling initiatives. The applicant's contract guarantees a reliable supply of municipal waste. They acknowledge that there may be a requirement to import some material from other waste streams (e.g. commercial and industrial waste) in order to supplement local municipal waste inputs to the proposed EWF facility. However, the applicants' analysis of future waste arisings supports the conclusion that commercial and industrial waste would remain a smaller percentage of waste imported to the proposed EWF and would decrease progressively over time. The applicant's forecasts indicate that the effect of increased recycling would be offset over time by predicted increases in household numbers and associated waste levels. Figures produced by the Office for National Statistics predict population figures in Shropshire will rise by over 10% between 2013 and 2031. Figures included in the West Midlands Regional Spatial strategy indicate that a further 25,700 new homes will be required in Shropshire between 2006 and 2026. Within Shropshire the town of Shrewsbury has been designated as an official regional growth point. The applicant advises that the proposed 90,000 tpa facility has been sized to ensure that there is sufficient capacity to deal with Shropshire's residual municipal waste throughout the remaining duration of the waste management contract, taking account of this predicted household growth. The government has announced that the intention to abolish Regional Spatial Strategies should be viewed as a material consideration in determining future housing applications. However, there is a close correlation in Shropshire between the Council's own predictions of population and household growth and those which are included in the RSS. Accordingly, it is considered that the RSS household predictions for Shropshire are likely to remain relevant as a basis for identifying the likely future waste management requirements within the county.

- 11.20 Justification for EWF – future waste levels. Available evidence suggests that there has been a recent levelling in waste arisings. It is not certain whether this is a short-term consequence of the economic downturn or a longer-term trend due to changing behaviour patterns of the public and retailers. Notwithstanding this, there is a close relationship between the level of municipal waste arisings and the number of households. The applicant states that whilst planned recycling initiatives such as extension of the kerbside scheme have the potential to increase recycling rates above the 52.5% minimum level referred to in the waste management contract, the predicted increases in household growth referred to above will offset these anticipated increases in recycling. It is considered that the forecasts which underpin the sizing of the proposed facility take appropriate account of the current waste management context and are based on robust assumptions about household growth. It is concluded that the current levelling in waste arisings does not undermine the need for a waste recovery facility to deal with residual municipal waste in Shropshire.
- 11.21 Justification for EWF – spare incineration capacity nationally Information from the Environment Agency shows that 39% of all incineration capacity in England and Wales was unused in 2007. However, 74% of total municipal waste incinerator capacity was used. Whilst there has been some debate over incineration capacity nationally, the applicant states that the proposed EFW facility has been sized and located specifically to meet the requirements for management of Shropshire's municipal waste. The applicant's contract would provide added reassurance regarding the ability to provide the proposed EWF with suitable supplies of municipal waste. It is not considered that national incineration capacity figures provide any evidence to question the need for the proposed EWF.
- 11.22 Justification for EWF – barriers to recycling The applicant recognises that there are a

number of potential barriers to recycling. This includes lack of public participation and difficulties in recycling certain types of residual waste such as composite packaging. Limitations imposed by post-recycling reprocessing facilities can also affect recycling, including the fact that markets for some recycled products are still undeveloped so the demand for recycled goods is sometimes not high enough to support nationwide collection and re-processing. The applicant is implementing measures to promote increased public participation, including:

- Introducing regular promotional activities to raise awareness of recycling and the collection services provided, including through visits to local facilities including supermarkets and provision of leaflets to households;
- providing support, including financial backing for the training and development of Recycle Champions;
- continuing to provide recycling banks and guided tours of recycling facilities to schools;
- developing the use of waste tonnage data combined with collection round information to identify those areas that would benefit most from further promotion of recycling and the services provided

11.23 With respect to difficult wastes the applicant has expanded the provision of bring banks and recycling services at Household Recycling Centres for certain types of composite packaging that can be recycled and will continue to review such services as technology and recycling of composite wastes develops. With respect to post-recycling reprocessing facilities the applicant states that wherever possible, longer-term contracts will be entered into with re-processors located either within or close to the County in order to ensure security of the delivery point and to minimise transport costs. The applicant states that the high quality of material supplied from Shropshire has helped and will continue to help secure contracts, particularly during times when markets for recyclates are depressed. The specific measures which the applicant is undertaking in order to overcome the remaining barriers to recycling are acknowledged. It is recognised that overcoming these barriers involves aspects of waste management which are not wholly controlled by the applicant, including public participation and the recycling markets. Therefore achievement of aspirational targets by any organisation will be reliant on outside influences. The applicant states that this is one of the reasons for the level at which contractual minimum targets are set.

11.24 Justification for EWF - Implications for recycling The applicant has confirmed that the current facility would require a minimum of approximately 88,000 tonnes of residual waste per annum in order to operate efficiently. Objectors have claimed that this requirement for a steady throughput of combustible material would discourage increased recycling. They state that evidence from other local authority areas suggests that the rate of recycling is relatively depressed in areas with operational EWF facilities. However, the suggestion that increasing waste incineration will reduce recycling and resource recovery is not supported by Waste Strategy 2007 (Chapter 5, paragraph 23). The applicant points out that at 46% Shropshire is already significantly exceeding relevant recycling targets and national average levels. Recent municipal waste management statistics released by DEFRA (Provisional Quarter 1 2009/10) indicate that the current national average rate of household waste recycling is 38.3% (between July 2008 and June 2009), increasing from 37.6% between April 2008 and March 2009.

11.25 The applicant cites proposed new waste recycling initiatives proposed as evidence of

the commitment to facilitate increased recycling, including:

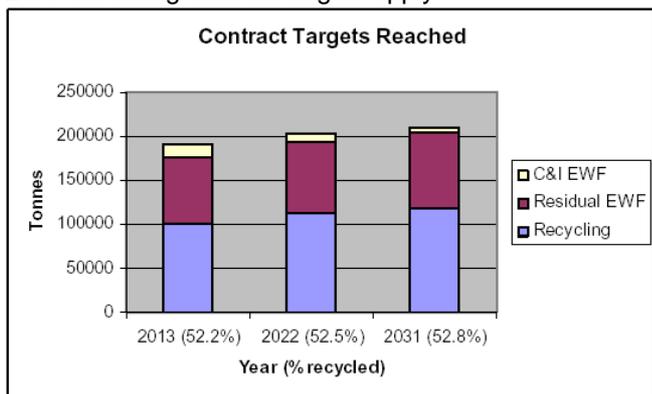
- the provision of a kerbside plastic recycling service by March 2011;
- the expansion of the collection of mixed compostable waste to include food waste for all former district and borough councils in Shropshire;
- the expansion of the Integrated Waste Management Facility at Craven Arms to handle additional recyclates and relocation of the Collection Depot thereby improving recycling services and;
- the development of a purpose built In Vessel Composting facility to serve the Shropshire area (subject to a separate planning permission).

In addition, the applicant advises that Waste Strategy 2007 lists other possible incentives which may potentially impact on recycling rates during the term of the contract. This includes in particular the possibility of removing the ban on local authorities introducing household financial incentives for waste reduction and recycling.

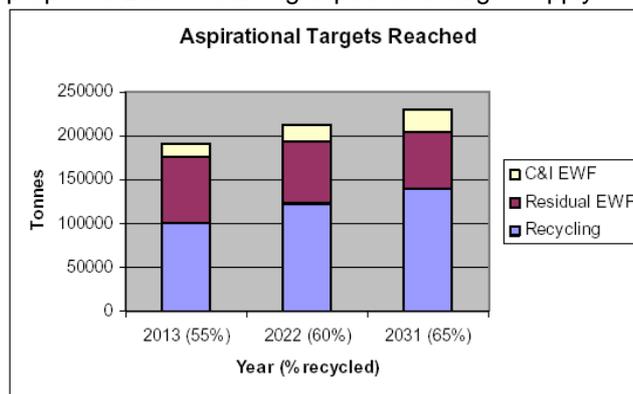
- 11.26 The applicant states that to increase the composting and recycling rate from the current level of 48% to 52.50% by 2020 requires in the region of an additional 8,000 tonnes of compost and recycling material which represents a challenging increase to be achieved through the contract. The applicant adds however that if Incinerator Bottom Ash and metal recycling from the EWF are also included in the composting and recycling figures, the contract recycling rate would increase to around 65%. It is further stated that the contract recycling target excludes materials which are reclaimed from waste delivered to Household Recycling Centres and that, if these are included, the predicted recycling rate would increase further, by more than 2%. The applicant emphasizes that the EWF proposals form part of an integrated waste management system for Shropshire which is designed to maximize opportunities for recycling prior to final disposal. It is stated that the proposed EWF plant has been sized to cater only for the residual waste remaining after kerbside recycling reductions are applied.
- 11.27 The applicant has also produced supplementary figures which suggest that proposed additional recycling measures would have the potential to increase recycling above the 52.5% level specified for 2020 in the contract (figures 2 and 3 below). This would significantly exceed the waste recycling target of 45% for 2020 set out in Waste Strategy 2007. It is considered that the assumptions underpinning the sizing of the facility are robust and that the proposed facility should not compromise the ability to achieve current national and regional recycling targets, or higher 'aspirational' recycling levels approaching 60%.
- 11.28 Justification for EWF – achieving aspirational recycling targets Objectors have claimed that increases in recycling above current targets would reduce the need for the proposed EFW. There has been a tendency for national waste management targets to increase over time and the waste hierarchy establishes a general presumption that waste recycling should be maximised before recovery options are pursued. The House of Commons Environment, Food and Rural Affairs Committee of the previous government published a report on the National Waste Strategy 2007 on 6<sup>th</sup> January 2010 which provided an indication on the direction of future waste management thinking at the time. The report recommends that DEFRA should raise the recycling targets in the National Waste Strategy to 50% by 2015 and 60% by 2020.

11.29 The applicant’s statement that a proposed 50% recycling level by 2015 would be achievable in the context of development of the current EWF proposals appears reasonable. It is also considered that the proposed 60% target for recycling household waste by 2020 (excluding ash recycling and material reclaimed from waste delivered to HRCs) would potentially also be achievable in the context of new household waste recycling initiatives. Whilst this may necessitate a greater level of importation of commercial and industrial waste to the proposed EWF, residual municipal waste would continue to remain the principal feedstock for the facility. Figure 2 shows that if current contract targets apply then the quantity of commercial / industrial waste needed to supply the EFW would decrease from 15,000 tonnes in 2013 to less than 5,000 tonnes in 2031. Figure 3 shows that if higher aspirational targets apply then the quantity of commercial / industrial waste required for the EWF would increase progressively over time from 15,000 tonnes in 2013, but would remain less than 30,000 tonnes by 2031. Therefore even if higher aspirational recycling levels apply in the future, a substantial amount of residual municipal waste would still remain as a principal feedstock for the proposed EWF. Given these considerations it is concluded that the proposed EWF would not compromise the ability to achieve higher levels of municipal waste recycling than those specified in the applicant’s waste management contract.

**Figure 2 – The proportion of wastes supplying proposed EWF assuming contract targets apply**



**Figure 3 – The proportion of wastes supplying proposed EWF assuming aspirational targets apply**



11.30 Effect of the proposed EWF on recycling of commercial and industrial waste  
 Objectors have alleged that the likely requirement to import subsidiary amounts from other waste streams such as commercial and industrial waste during the earlier stages of the facility could hinder recycling of such wastes. They have also questioned whether sufficient supplies of suitable materials would be available locally. The applicant has responded that Veolia currently has contracts to manage 50,000 tonnes of commercial and industrial waste in the Shropshire area, a significant amount of which comes from Shrewsbury. The Waste Local Plan advises that in 2000/01 municipal waste comprised 16% of all waste generated in Shropshire. Commercial & Industrial waste amounted to 34%. Construction & Demolition waste amounted to 47% with 3% comprising hazardous waste. Therefore, any commercial and industrial waste which is directed to the proposed EWF facility would represent only a small proportion of the total amount of Commercial and Industrial waste being generated in the county. The applicant states that only non-recyclable C&I waste would be imported to the proposed EWF facility and that sufficient supplies of such waste are readily available in the local area. It is not considered that importing subsidiary amounts of residual C&I waste to the proposed EWF facility at the anticipated rate would have a detrimental effect on rates of C&I recycling in

Shropshire.

- 11.31 Justification for EWF - Conclusion Relevant policies and guidance support the need for a strategic facility for management of Shropshire's residual municipal waste which the proposed facility would be capable of meeting. Objectors have challenged the forecast criteria which the applicant has used to justify the facility. However, it is considered that these forecasts are robust and take appropriate account of the best available data on waste generation and the number of households in the County up to 2026. Information provided by the applicant indicates that a substantial amount of residual waste will still need to be dealt with, even after continued improvement in recycling performance. It is acknowledged that recycling performance becomes progressively harder to achieve, especially beyond the 50% level.
- 11.32 It is considered that the proposed EWF facility would be capable of forming part of an integrated waste management system for Shropshire which would be capable of meeting and exceeding current local and national recycling targets. It is not considered that the proposals would compromise the ability to achieve higher 'aspirational' recycling levels approaching 60%. This may necessitate the importation of a higher proportion of residual waste from other waste streams. However, such other wastes would remain subordinate in quantity to residual municipal wastes derived from Shropshire. Available information also suggests that supplies of such alternative wastes are likely to remain readily available throughout the design life of the proposed facility, without compromising the ability to increase recycling of the waste streams concerned.
- 11.33 It is acknowledged that the proposals would divert substantial quantities of municipal waste from landfill, and would involve the use of established waste management technology on an existing allocated waste management site within an established industrial estate. It is considered that the need for a treatment facility for Shropshire's residual municipal waste would potentially qualify as a material consideration which may justify departure from the strict schedule of waste management processes listed in the Site Profile accompanying Waste Local Plan Policy 6. This is provided none of the alternative waste management processes identified within the Site Profile can be shown to provide a more practicable and environmentally acceptable waste management solution. Alternatives are considered in the succeeding section. It is also considered that the EWF proposals are potentially capable of being accepted in relation to Waste Local Plan Policy 17 and associated need and sustainability issues. This is provided the proposals can also be accepted in relation to other relevant development plan policies and local considerations.

## CONSIDERATION OF ALTERNATIVES

- 11.34 Alternative technologies – general. The Environmental Impact Assessment process requires consideration of alternatives and justification of the choice taken, having regard to the environmental effects. The applicant has assessed a wide range of technologies and an option of 'do nothing' against a defined set of sustainability criteria. The applicant states that the assessment is restricted to alternative technologies and sites for the treatment of residual municipal and similar wastes arising in Shropshire, having regard to the recycling and composting infrastructure that is already either in place or planned in the County. The applicant considers all of the generic technology options considered to be associated with some level of detrimental impact (e.g. energy use, residues disposal quantities and economic cost).

All options are also considered to offer potential significant benefits, particularly in terms of sustainable consumption and production and sustainable communities objectives. The do-nothing scenario is however not considered to be a sustainable option, since it is principally dependent on out of county landfill.

- 11.35 The applicant states that options other than thermal technologies, whilst higher up the waste hierarchy, are also heavily dependent on out of county landfill for the disposal of residuals. The applicant does not consider processes such as pyrolysis, gasification and related thermal technologies to be commercially proven and robust technologies in the UK. The applicant concludes that EWF is the only technology which can be considered as proven and capable of offering a complete solution for the management of residual waste. Veolia considers that the relatively small throughput capacity of the facility, when coupled with other components of the integrated waste management service, represent a robust, flexible and affordable solution which reduces overall transport movements and exports from the County.
- 11.36 Alternative technologies – future trends The current proposals would form a key long-term component of Shropshire’s municipal waste infrastructure, influencing the way in which municipal waste is managed in the county for at least the next 27 years. The applicant states in this respect that the proposals would form part of an integrated waste management system which allows current waste recycling and composting targets for municipal waste to be met and exceeded. Objectors have however argued that current recycling targets are unambitious and the proposals could hinder future recycling initiatives. The waste hierarchy PPS10 places recycling and composting above EWF and there has also been a tendency for waste recycling targets to increase over time. It is appropriate therefore to consider the extent to which further ‘aspirational’ increases in the level of recycling may be achievable and what implications this may have for the current EWF proposals, in the context of the key principles set out in PPS10.
- 11.37 The applicant’s waste management model for Shropshire focuses on the collection of recyclable and compostable materials at source, through initiatives such as kerbside collection and planned extensions to this scheme. Residual waste which is not recycled at source would be dispatched to the proposed EWF facility. The applicant is not proposing to reclaim recyclable or compostable materials from the residual ‘black bag’ waste once it has been collected from the householder. Further clarification has been provided on the reason for rejecting facilities involving intermediate treatment of waste prior to final disposal such as Mechanical Biological Treatment (MBT) and Material Recycling Facilities (MRF). The applicant states that such facilities can potentially facilitate increased recycling before final disposal (i.e. to EWF) which would be preferable in terms of the waste hierarchy. The applicant questions the need for an MBT facility or MRF as Shropshire is already exceeding the Waste Strategy 2007 recycling target of 45% by 2020 and planned extension to the kerbside scheme will ensure that the recycling level in the applicant’s contract can be achieved. Veolia advise that the MRF process would introduce another step in the processing of the remaining residual waste stream, resulting in further cost and energy used to pre-process this material.
- 11.38 The company cites the following disadvantages of MRF / MBT facilities:

- They can be more labour intensive and hence costly to run than EWF facilities and can also be associated with problems such as odour, pests and additional hazards to the workforce.
- The mixed nature of the residual waste handled by MRFs / MBT facilities can limit the ability to reclaim material effectively from the waste stream.
- There is a tendency for material reclaimed through such facilities to be contaminated (e.g. through admixture of solids and liquids). This may in turn increase the risk that materials recycled through MRFs / MBT facilities will be rejected by recycling companies and despatched instead to an EWF facility. In contrast, The applicant states that the 'clean' materials reclaimed through kerbside collection are more readily accepted by recycling companies.
- They would be likely to require a larger area than is available in the current application site and no suitable larger sites have been identified within The applicant's search parameters.
- The final residual waste from a MRF / MBT process would still require disposal either via an EWF or to landfill.

11.39 Moreover, the applicant states that the high level of kerbside segregation achieved in Shropshire means that less recoverable/marketable materials would remain, making the MBT process less economic. Difficulties surrounding the use of alternative thermal technologies such as pyrolysis are also cited, including:

- The requirement to pre-treat waste to remove unsuitable materials and provide a small (approx. 2mm for fluid bed reactors) uniform feedstock;
- Substantial heat input is required to raise the biomass feedstock to the requisite temperature;
- Scaling up limitations apply;
- Disposal is required of the resultant char material, often through energy recovery via incineration;
- Expense and associated risk relating to construction of an unproven technology at a large (90,000 tpa) scale, combined with the cost of additional pre-treatment requirements of such a technology to produce a uniform waste input.

11.40 Veolia state that to their knowledge there are no large scale (e.g. 90,000 tpa) pyrolysis facilities operating in the UK. In these circumstances the company consider that directing residual municipal waste to an EWF is a more practical, efficient and environmentally acceptable solution. They question whether the costs and potential environmental impacts of running a MRF / MBT facility could be justified in circumstances where Shropshire through its waste management contract is seeking to increase recycling levels and has identified specific measures to achieve this. In the context of global warming and energy security concerns the company considers that the energy value of residual municipal waste should also be viewed as a significant material consideration to be weighed against any potential benefits of attempting to recycle such material.

11.41 Anaerobic Digestion (AD) performs best on segregated organic waste such as garden/kitchen waste and is less suited in terms of energy recovery as a treatment for mixed residual waste. Green waste is already collected through the kerbside scheme and the applicant is proposing to extend the kerbside collection of kitchen waste throughout the county. This would significantly reduce the potential for the residual

waste to be an effective feedstock for Anaerobic Digestion. If the feedstock for AD contains residual municipal waste then the final residues of AD cannot be used in agriculture. Hence they would be likely to go to landfill or be incinerated. By contrast, residues from EWF of mixed waste are potentially recyclable and marketable (i.e. as a substitute for primary aggregates). The applicant is proposing to deal with food waste collected through the kerbside recycling scheme by establishing an in-vessel composting facility at a site near Telford. This will form the subject of a separate planning application to be submitted to Telford & Wrekin Council.

- 11.42 The effect that new technologies and targets may have on future waste management options is recognised. However, it is necessary to assess the current application on the basis of current policies and guidance. The Waste Local Plan and the RSS make it clear that action is required now in order to provide for Shropshire's future municipal waste management requirements. The applicant's statement that EWF represents the best currently available technology for dealing with Shropshire's residual municipal waste is acknowledged. The extent to which EWF also provides an acceptable solution in relation to relevant guidance on renewable energy and climate change is considered further in succeeding sections.
- 11.43 Alternative sites. The regulations governing preparation of Environmental Statements require that an assessment is undertaken of alternative sites for the development. The Waste Local Plan provides general guidance with respect to the location of waste management sites. The Plan states that proposals should comply with the proximity principle and capacity should not exceed local need (6.14). It is acknowledged (6.15) that the principal sources of waste generation are urban areas, where the availability of land and amenity considerations can limit the choice of sites. The relationship between potential waste sites and the transport network will therefore strongly influence the distribution and siting of waste facilities.
- 11.44 Veolia began its consideration of alternative sites by reviewing the site search and selection exercise undertaken by Shropshire County Council during preparation of the Shropshire Waste Local Plan 2002 – 2014 (WLP). Account was taken of the assessment of alternative sites made in the ES that accompanied the planning application for the existing IWMF facility at Battlefield (ref MS03/0985/SY). In addition, consideration was given to sites allocated for employment use in the local plans adopted since 2002/3 and other potential sites suggested during consultations undertaken during preparation of the current application. The applicant's consultants tested the appraisal of these sites using a number of key selection criteria including location and size. Following this review, the company concluded that the only site to satisfy the key selection criteria was the current application site.
- 11.45 The Waste Local Plan identifies the site as potentially suitable for a strategic waste management facility. It is accepted that the Plan fails to identify any more suitable sites for such a facility within the applicant's search parameters. It is also acknowledged that the site offers co-locational benefits in accordance with Waste Local Plan Policy 10 which would have environmental benefits including by minimising associated transport requirements. The applicant states that the site was selected following a comprehensive assessment of the land use impacts and available mitigation measures and offers benefits relative to other identified sites in terms of location access and size. It is considered that the applicants' decision to put forward a planning application for the current site in preference to an alternative location has taken account of relevant locational factors and waste management

considerations, including the key tests set out in PPS10. It is also necessary however to assess whether the proposals would give rise to any unacceptable adverse impacts on interests of acknowledged importance, including the environment and other local impacts.

- 11.46 Alternatives – conclusion. It is considered that the Environmental Statement and supplementary information provided by the applicant has satisfactorily justified the decision to prefer EWF to other technologies, including those listed in the Site Profile accompanying Policy 6 of the Waste Local Plan. It is also accepted that continued landfilling would not be a sustainable option for future waste management in Shropshire, and that the proposals would be capable of meeting the identified need for waste recovery capacity. The applicant has put forward evidence to justify the conclusion that no alternative technologies are available which would provide an equivalent degree of robustness and cost-effectiveness with respect to the management of residual municipal waste in Shropshire. In particular, the applicant has highlighted significant practical, cost and environmental issues associated with the establishment of treatment facilities such as MBT / MRF for the purpose of managing Shropshire's residual municipal waste. The fact that Pyrolysis/Gasification has no proven commercial track record in the UK is also acknowledged. By contrast, it is accepted that EWF does provide a robust recovery solution using established technology with a high degree of confidence. The site is located favourably in relation to relevant waste management criteria and the applicant's assessment has failed to identify any alternative sites in more favourable locations from a waste management perspective. It is concluded that the above factors would potentially qualify as material considerations which would justify departure from the waste management processes listed in the Site Profile accompanying WLP Policy 6. Notwithstanding this, it is also necessary to establish whether the proposals can be accepted with respect to other relevant development plan policies and guidance covering issues such as ash management, climate change, renewable energy, environment, health, amenity and heritage.

### ASH MANAGEMENT

- 11.47 The proposed EFW would produce 25,000 tonnes of Incinerator Bottom Ash (IBA) each year. The applicant advises that it is committed to recycling (IBA) from the Battlefield EWF and has existing capacity to recycle approximately two thirds of the IBA that would be produced at Battlefield EWF. The applicant is currently seeking to bring forward suitable off-site recycling locations, possibly in conjunction with the IBA arising from other similar facilities. Information provided by the applicant confirms that there is a financial incentive to recycle IBA, given the financial costs of landfilling and the revenue derived from recovered metals. The applicant is prepared to enter into a legal agreement with Shropshire Council requiring that all reasonable steps are taken to transport IBA to a suitable recycling/reprocessing facility for the production of secondary aggregates. This is providing that it remains practically and financially viable to do so. The applicant envisages that any legal clause would include a requirement to submit of annual reports detailing the recycling / reprocessing facilities used and the tonnages transported in the preceding year.
- 11.48 The applicant recycles IBA from the Birmingham EWF and the Energy Recovery Facility in Deptford with its partner Ballast Phoenix and is currently looking to extend this to cover the Sheffield EWF. Bottom ash is also recycled from all of the facilities operated by Veolia in Hampshire (i.e. Chineham, Marchwood and

Portsmouth). During 2008 the applicant with its partners recycled 261,331 tonnes of bottom ash. The applicant states that it has worked on developing outlets for the reuse of IBA since 1994 in the UK and in international operations over longer periods. Veolia also works with other ash producers and aggregate companies in order to establish industry protocols and practice for reuse which strengthens the market for these aggregate materials. As with other recyclates, long term markets are difficult to establish since there are fluctuations in value which are difficult to predict. However, The applicant is committed to treatment of IBA to ensure the end products are suitable for re-use in appropriate applications.

- 11.49 The applicant states that any trace contaminants present in the input to the EWF process will further reduce in future as the hazardous content of manufactured goods is reduced and items such as waste electrical equipment and household batteries are recycled upstream. It is stated that this will make it even less likely that IBA will be classified as hazardous in future. Inspection of waste entering the waste bunker, during mixing and loading into the furnace feed hopper will also help to minimise any large items of contamination. The waste entering the furnace will be further controlled through removal of large contaminants at the satellite IWMFs and Battlefield HRC prior to shredding of bulky household waste within the tipping hall and waste bunker area. Nevertheless, the applicant advises that should any potential contaminants in the ash rise in concentration the treatment either before or after combustion would be adapted, for example to remove more metals, and render the aggregate suitable for reuse. It is considered that the applicant has demonstrated an appropriate level of commitment to recycle IBA from the proposed EFW at this stage in accordance with the key principles of PPS10 and the Waste Local Plan.

#### CLIMATE CHANGE AND ENERGY EFFICIENCY

- 11.50 Assessment in relation to Waste Local Plan Policy Policy 17 (Energy Recovery)  
Waste Local Plan Policy 17 states that proposals to recover energy from waste will be permitted in appropriate locations where it can be demonstrated to the satisfaction of the Waste Planning Authority that:
- a) The proposal forms an essential part of a sustainable waste management system for Shropshire; and
  - b) That the proposal does not undermine the provision of waste management facilities further up the waste hierarchy; and
  - c) The proposal complies with other relevant policies in the Development Plan.

There will be a presumption against the heat treatment of waste without energy recovery.

- 11.51 The supporting text to Policy 17 recognises the potential role which energy recovery facilities can play in achieving the key Waste Local Plan objectives of maximising waste recovery and reducing the need to landfill. It is stated that favourable consideration will be given 'to proposals which capture both heat and power'. All waste to energy recovery facilities must also 'make provision for 'front end' recycling or composting and the recycling or other management of all residues to ensure that the maximum amount of material is recovered'. It is further stated that 'modern energy recovery facilities are industrial in nature and this must be reflected in the selection of appropriate locations' and, 'the scale and design of

buildings should reflect their location and setting. The Waste Planning Authority will expect a high standard of design for such buildings' (6.89). The proposed facility would play a key role in managing residual municipal waste and diverting such waste from landfill. It is therefore considered that the proposals would be capable in principle of forming part of a sustainable waste management system for Shropshire focused on achieving current waste management targets (Policy 17a), This is provided the proposals would not undermine the provision of waste management facilities further up the waste hierarchy (policy 17b).

- 11.52 The applicant has submitted information which supports the conclusion that the EFW proposals would not compromise the ability to meet and exceed current municipal waste recycling targets. It is considered that the proposals are fully in accordance with relevant targets for waste recycling and are capable of being accepted with respect to WLP Policy 17b. It is concluded that the proposals are also capable in principle of complying with Waste Local Plan Policy 17 generally, provided that they can also be accepted in relation to other relevant development plan policies (policy 17c).
- 11.53 Energy efficiency – Plant design The Environment Agency has a statutory duty to consider best available technologies (including energy efficiency) through the permitting process, taking account of relevant EU and government legislation. PPS23 advises in this respect that that duplication between different permitting regimes should be avoided. However, it is considered that at a more strategic level energy efficiency is also a material planning consideration for the current application. This is having regard to relevant guidance and strategies including the Climate Change Supplement to PPS1, PPS22 (Renewable Energy) and the UK Renewable Energy Strategy which includes a legally binding UK target of 15 percent of energy from renewables by 2020.
- 11.54 The applicant has calculated the energy efficiency of the plant (the ratio of energy input to energy output by a plant). As well as being exported, recycled energy is also used for a variety of operations within a typical EWF plant (e.g. pumping, gas scrubbing). Consequently, the net efficiency of the EWF is lower than the gross efficiency. The applicant calculates the gross efficiency of the Battlefield EWF as 23.0% whilst the net efficiency is 19.7%. This is lower than is typical for EWFs, as the proposed waste throughput of 90,000 tonnes per annum is relatively low in comparison to other such facilities. Where larger tonnages of waste are combusted the efficiency of a facility increases due to associated economies of scale. However, the applicant advises that the size of the Battlefield EWF has been selected specifically to manage waste produced in Shropshire. Whilst EWF's have lower gross energy efficiencies than coal or gas fuelled energy plants the applicant states that EWF's have a lower carbon footprint than fossil fuel energy plants. This is taking account of factors such as emissions associated with mining and transport and the greenhouse gas generation potential of the biodegradable content of residual municipal waste.
- 11.55 The applicant states that the EWF has been designed with many energy efficient measures to improve the performance of the plant, taking account of engineering considerations associated with municipal waste combustion (i.e. corrosion of boiler tubes at high steam temperatures). This includes:

#### Plant operation

- heat recovery from different parts of the processes;
- good insulation;
- plant layout;
- optimised efficiency measures for combustion plant;
- continuous incineration process; and
- real-time monitoring of electricity demand.

#### Steam cycle

- low condenser vacuum pressure;
- preheat of combustion air;
- preheat of boiler feedwater;
- generation at 11kV and export at 11/33 kV to the local electricity network;
- turbine steam pass out provision which may be used for district heating;
- maintenance of heat exchangers in order to maintain high heat transfer;
- a Computerized Monitoring and Maintenance System (CMMS);
- variable speed drives for air cooled condensers and induced draught fan.
- The steam cycle is a closed loop design. Steam leaks are checked for on a daily basis by and appropriate remedial measures are undertaken

- 11.56 The applicant also advises that there is a commercial incentive to optimise energy efficiency of the plant, as sales of electricity and therefore revenue would increase. Careful consideration would be given to the type of steam turbine employed at the site to ensure the optimum balance between energy efficiency and reliability. The exhaust from the pass-out turbine would also be controlled to optimise energy efficiency. Therefore, 1MW<sub>e</sub> of extra electricity could be generated prior to implementation of any CHP scheme. It is considered that the design of the proposed EFW plant takes appropriate account of the energy efficiency considerations in relation to electricity generation.
- 11.57 Energy efficiency – Use of waste heat Current and emerging guidance supports the requirement to recover heat from EWF facilities. The supporting text accompanying Waste Local Plan policy 17 advises that ‘favourable consideration will be given to proposals which capture both heat and power’ (in 6.86). The draft Phase 2 RSS promotes the use of renewable energy resources including amongst other matters energy from waste, subject to compliance with environmental acceptability criteria (policy E1). Policy E2 of the RSS also promotes the use of ‘good quality combined heat and power systems and district heating schemes’ for developments.
- 11.58 A report for the previous government into the National Waste Strategy 2007 advises with respect to thermal technologies (in para 89) that ‘regardless of technology used, to achieve maximum efficiencies waste heat must be captured and utilised, for example for district heating (House of Commons Environment, Food and Rural Affairs Committee - 6 January 2010). The report advises that new EWFs are being constructed without provision for use of waste heat, despite two thirds of the energy produced by such plant being converted to heat. Problems with fitting CHP infrastructure retrospectively are cited. The report cites Environment Agency policy requiring heat to be recovered by all municipal waste incinerators. The report recommends that ‘to ensure that only energy efficient methods of generating energy from waste are adopted, the Government should require planning applications for such plant to demonstrate how heat produced will be captured and used’ (90).

- 11.59 The applicant has acknowledged the potential benefits of utilising waste heat from the EWF process and has confirmed that the design of the proposed facility would in principle allow this to occur. The location of the proposed EWF on Battlefield Enterprise Park emphasises the potential for future heat use when compared to other possible locations for such a development. The applicant states that in addition to existing potential heat users in the Battlefield Enterprise Park and its immediate vicinity, there is good potential for district heating of future developments, particularly if supported/encouraged by Shropshire Council through the planning process. A 'roadmap' for District Heating (DH) implementation has been prepared by the applicant. This outlines the processes that would be followed to ensure that the opportunities for heat recovery from the Battlefield EWF are regularly re-evaluated and are implemented when conditions are suitable.
- 11.60 The applicant has undertaken a study to identify heat users in the area surrounding the proposed EWF and has entered into exploratory dialogue with a number of potential customers. The applicant is also willing in principle to enter into a planning obligation to promote the use of waste heat from the proposed facility and has suggested a draft wording for an appropriate Legal Agreement clause. This is dependent upon key economic criteria being met, given the substantial initial investment cost of developing CHP infrastructure. The applicant advises that district heating schemes are commonly developed in conjunction with an authority other than the operator who is able to facilitate development of such a scheme. It is recognised that there are practical difficulties associated with the establishment of a CHP scheme and that there are limits on the ability to progress any scheme before the outcome of the current application is known. However, the applicant's willingness in principle to commit to such a scheme provided appropriate economic criteria are met is acknowledged. It is considered that a Legal Agreement would in principle be capable of establishing an appropriate presumption in favour of establishing a DH scheme at Battlefield, whilst acknowledging the technical obstacles which would first need to be overcome. It is concluded therefore that the application is capable of complying in principle with this objective linked to Waste Local Plan Policy 17.
- 11.61 Classification of EWF In defining incineration as an energy from waste technology the Waste Strategy for England 2007 provides general support for the development of waste incineration to manage residual municipal waste. The EWF proposals have been put forward as a recovery process incorporating generation of renewable energy and a better option than 'disposal' in terms of the waste hierarchy. European legislation in the revised Waste Framework Directive (Directive 2008/98/EC - 19 November 2008) may influence whether EWF is seen in future as 'recovery' or 'disposal', based on the energy efficiency of the EWF process. The Directive is to be transposed into English law with effect from December 2010. Whilst Planning Policy Statement 22 includes energy from waste as a category of renewable energy it excludes energy from mass incineration of domestic waste. However, the glossary in the more recent Climate Change Supplement to Planning Policy Statement 1 includes EWF in the list of renewable and/or low carbon energy supplies. Notwithstanding the detailed classification of EWF, The applicant's commitments with respect to energy efficiency are acknowledged. It is also recognised that, notwithstanding the detailed categorisation of the EWF process, the current proposals would assist in achieving more diverse and secure sources of future energy supply.

## CARBON FOOTPRINT

- 11.62 The government has provided guidance on addressing climate change and emission avoidance in a supplement to PPS1. The Waste Strategy for England 2007 sets out the government's vision for waste management, including its role in managing greenhouse gas emissions. The applicant has assessed the potential carbon footprint for alternative waste management scenarios. This assessment concludes that the proposed Energy from Waste Facility performs well in reducing greenhouse gas emissions compared with the current waste disposal route to landfill. The EWF emissions would include carbon dioxide but this is a far less potent greenhouse gas than the methane in landfill gas. Accordingly, the applicant estimates that over the assumed life of the project, between approximately 595 and 668 thousand tonnes of CO<sub>2</sub> equivalent emissions could potentially be avoided through the installation of the facility, relative to the situation with continued landfilling. The development's CO<sub>2</sub> emissions are also compared favourably to those which would be expected for the same energy output from a fossil-fuel power station. The assessment concludes that the EWF performs well in terms of carbon footprint, but there would be substantial additional benefits in terms of carbon footprint if a heat customer can be secured.
- 11.63 The Waste Strategy for England 2007 provides (in Appendix E) some indicative greenhouse gas figures relating to a selection of waste management technologies. These figures support the applicant's conclusions that EFW is preferable to landfill. Alternative technologies such as MBT ("Dirty MRF") also demonstrate a reduction in greenhouse gas emissions relative to landfill. However, there are practical issues associated with such technologies:
- Separation of recyclable materials at source ensures that materials of suitable quality for recycling are recovered. MBT produces a lower quality and quantity of recyclable materials relative to that produced by source separated recycling (with the possible exception of metals). The acceptability of recycled materials is quality dependent. Hence, larger proportions of material are therefore likely to be rejected / removed during reprocessing.
  - The applicant believes that using MBT drives policy the wrong way by removing the responsibility the householder has for the waste that they produce.
  - MBT is a pre-treatment process. There will always be a significant proportion of material that requires downstream treatment either by treatment via energy recovery or disposal to landfill.
  - In order to protect land banks and health the UK Environment Agency has effectively banned mixed outputs from MBT being applied to agricultural land. There are some limited land remediation opportunities, however, the main outlet for this residue stream is disposal to landfill or treatment via energy recovery.
  - The typical land-take for the treatment of waste by MBT is greater than for an EWF. An area significantly larger than the current application site would therefore be required. The applicant has not identified a sufficiently large site. They therefore state that ability to reduce greenhouse gas emissions associated with current landfill practices is dependent upon delivery of the current EFW proposals.

- Anaerobic Digestion (AD) of residual municipal solid waste (MSW) requires pre-treatment to remove inorganic materials. This is difficult to achieve in practice, therefore the digestion process can be complicated by contamination. AD of the organic fraction of MSW typically incurs higher financial cost and technical risk than EWF.
- Autoclave options generally perform better than EFW on global warming. However, most facilities are small-scale demonstration plants only and the end markets for autoclave floc are uncertain. If only 50% of the autoclave product is assumed to find a market then autoclave is outperformed by both EWF and MBT.

11.64 Carbon footprint – waste management contract requirements Veolia has confirmed that its contract with the Shropshire Waste Partnership involves a formal requirement to reduce the carbon footprint of the company's waste management activities in Shropshire. The carbon emissions associated with the company's current waste management activities in Shropshire have been modelled using the Environment Agency's life cycle assessment tool (WRATE). Agreed reductions in future carbon emissions have also been built into the contact with penalties if these reductions are not achieved. It is considered that the company's contractual obligation to reduce carbon emissions provides reassurance regarding the future carbon footprint of waste management operations in Shropshire of which the current proposals would form an important element.

10.65 Carbon footprint – transportation The applicant states that the proposals would facilitate a reduction in the carbon footprint associated with the management and transportation of waste in Shropshire. This would occur as the proposed EWF at Battlefield would receive residual municipal waste which is currently exported greater distances to landfill sites outside of the county. The proposals also offer the potential to reduce the carbon footprint associated with waste transportation. This is given central location of the site within Shropshire and the ability of the satellite recycling centres to bulk up waste for delivery to Battlefield. The company's contractual obligation to reduce carbon emissions (see preceding section) would incorporate a consideration of transportation. Transport issues are considered further in a succeeding section.

11.66 Carbon footprint – microgeneration The applicant is prepared to consider the inclusion of small scale renewable sources of energy such as solar and wind power as part of the design and build phase of the development in order to further offset carbon emissions. A significant number of micro-turbines (of the order of 100s) or a significant area of photo-voltaic panels (either on the roof or on the southern side of the development) would be required in order to make a significant reduction in the carbon footprint of the development, with consequent potential for visual impact. The applicant points out that the existing site already features a ground source heat pump and rainwater harvesting and the BREEAM Assessment carried out in support of the current planning application rates energy efficiency of the proposed design as "good". Notwithstanding this, it is considered that there may be potential to further reduce the carbon footprint of the development through micro-generation without impacting adversely on the appearance of the site. It is considered that this would also provide an appropriate message about sustainable resource use to users of and visitors to the site. It is recommended that a planning condition to cover this matter is imposed in the event that planning permission is granted, in accordance with the advice in the PPS1 supplement.

11.67 Carbon footprint – conclusion On balance it is concluded that EWF is an appropriate technology which offers clear advantages in terms of climate change over continued landfilling. If users can be found for heat from the EFW then there would be a further significant reduction in the carbon footprint of the EFW proposals. Alternative waste management technologies such as MBT also have the potential to reduce greenhouse gas emissions relative to the current situation. However, there are practical problems associated with such technologies. It is concluded that the current proposals are in general accordance with relevant and emerging policies and guidance with respect to global warming and associated issues, including Waste Local Plan Policy 17 and the climate change supplement to PPS1.

## ENVIRONMENTAL AND AMENITY CONSIDERATIONS

11.68 General development issues such as visual impact, impacts on the natural and historic environment and traffic are planning considerations which would apply to a variety of development options for the site. However, the Environmental Statement also recognises the careful consideration that needs to be given to issues more specific to the proposed EWF such as air quality and health considerations. The ES examines the potential environmental and amenity impacts of the proposals on surrounding land uses. A number of potentially sensitive issues are identified and a range of mitigation measures are proposed which seek to prevent or minimise any potential adverse effects. Overall, the ES concludes that there would not be a significant adverse effect on local amenities, given the design of the facility and the ability to impose appropriate safeguards. The individual environmental and amenity issues raised by the proposals and their associated mitigation measures are assessed in the following sections.

## LANDSCAPE AND VISUAL EFFECTS

11.69 Visual impact assessment. The Environmental Statement includes assessments of the potential landscape and visual impacts of the proposals. These were carried out in accordance with relevant methodology and supplemented by the use of a crane survey and 3D computer modelling. The landscape appraisal assesses the application site and immediate surrounds as being of low landscape quality and low sensitivity to the type of development proposed whilst that of the rural land to the north is considered to be of medium quality. The effects of the proposals on landscape character are considered during the construction period, in Year 1 and at 15 years. The assessment concludes that during the construction period and in Year 1 the proposed EWF would have negligible adverse effect on the landscape character of the application site and a slight adverse effect on the wider rural landscape. By year 15, the landscape assessment concludes that the proposed EWF would have a negligible adverse effect on landscape character. This is taking account of mitigation and other factors, such as the likelihood of additional buildings being built and the development of planting elsewhere in the landscape.

11.70 The visual impact assessment considers the appearance of the proposed EWF from a series of 17 surrounding viewpoints which have been chosen to illustrate the theoretical visibility of site. The sensitivity of viewpoints has been judged as ranging from high to low. The predicted magnitude of visual impact fell in the range medium to zero. For most locations the assessment states that the proposed EWF would be

viewed as an industrial building in an industrial context. From the car park of the Battlefield Visitor Centre 1.1km to the north-north-east the proposed EWF building would be seen against a backdrop of hills and would not break the skyline. Overall significance of visual impact is assessed as varying from substantial to none with most locations experiencing maximum impacts during the construction period, with impacts declining over the 15 year period as mitigation planting takes effect. For the majority of locations the assessment concludes that visual impact would be of slight or negligible significance. The assessment refers to the contribution that the linear woodland vegetation along the south side of the cutting of the A5124 Link Road would have in creating a visual barrier between the outer industrial edge of Shrewsbury and the open countryside beyond. A supplementary landscape survey in August 2009 found that the vegetation on the south side of this cutting was already locally exceeding 10m in height. Therefore, the typical early heights adopted for this vegetation in the photomontage exercise accompanying the Environmental Statement (5m) were conservative.

- 11.71 The Council's Landscape Officer has commented that there is a tendency to underestimate the sensitivity of the receptors. For example, it would be expected that the sensitivity of views from the Battlefield viewing mound (Viewpoint 1) would be assessed as high rather than medium as the landscape is generally the focus of their attention. Views from the Albright Hussey and the nearby footpath (Viewpoint 3) would also be expected to be of high sensitivity for the same reason. The Landscape Officer also considers that there may also be a tendency to overstate the likely mitigation effects of the proposed on-site planting.
- 11.72 The applicant subsequently commissioned a further photomontage of 5 viewpoints. The objective was to demonstrate the projected appearance of the site during years 5, 10 and 20 following construction of the proposed EWF, as viewed from the vicinity of the historic battlefield. The exercise took account of the anticipated effect of existing and proposed planting and planned new industrial buildings on the appearance of the proposed EWF facility over time. The applicant agreed parameters with officers before completing the photomontage exercise. This included final mature heights of 25m for the fastest growing trees and assumed heights for intervening buildings of 12m to the eaves (15m to top of roof), based upon indicative heights specified in the outline permission for these buildings.
- 11.73 Objectors have queried some of the assumptions in the updated photomontage exercise. It is suggested that thinning of planted trees will be required in the longer term and that this will ultimately reduce the effectiveness of existing and proposed planting in screening the building as viewed from the north. However, it is considered that the planting belt proposed to the immediate north of the proposed EWF building would be capable of being managed in order to maintain its screening effectiveness throughout the anticipated design life of the proposed building. This matter would be capable in principle of being controlled by an appropriately worded planning condition. Additional off-site planting has also been proposed by the applicant on Council - owned land adjacent to the Battlefield Link Road (see succeeding section). This has the potential to provide additional visual mitigation for views in the vicinity of the battlefield in the medium to longer term
- 11.74 Landscape and visual assessment – building scale PPS10 recognises (in 8.32) that 'a significant number of new waste facilities will be required between now and 2020, many of which will involve large buildings with a design life of 30–40 years'.

The guidance recognises the role which high quality design could play in helping to take forward the key planning objectives set out in PPS10. It is stated that ‘good building design and site layout of facilities in appropriate locations will improve community acceptance of waste management facilities by mitigating environmental impacts, including visual appearance, and reducing impacts on the amenities of neighbouring uses to an acceptable level’.

- 11.75 The proposed 28m high EWF building would be 14m higher than the existing waste transfer building. The heights of buildings in the industrial areas adjoining the current application site typically vary between 9 and 13m. Other taller buildings are located 290m to the south within the Stadco complex (approx 19m max) and 170m east south east at ABP (17m). The EFW building has however been designed to a high architectural standard by S’pace – an international architectural practice which has designed a number of other EWF’s developed by Veolia, including at Marchwood and Chineham in Hampshire. The applicant states that the design concept aims to produce a high quality facility that optimises the balance between technical, economic, social and aesthetic considerations and ensures successful integration of the development into its surroundings.
- 11.76 The EWF process requires a significant vertical height difference in the tipping hall in order that the grab crane can collect waste from the tipping hall and dispense it via a hopper onto the moving grate which feeds the burning chamber. This means that EWF buildings tend to be tall in comparison with typical industrial estate buildings. The internal layout of the proposed EWF building has however been designed in order to reduce the height of the building, including by recessing the tipping hall by 10m below the current ground level. Consequently, the building would be smaller than many equivalent EWF buildings. The upper part of the EWF building would also be constructed of a translucent material and with curved edges. This is intended to soften its appearance and mirror the shape of the hills which would provide a backdrop to the building as viewed from the north. An assessment of the visual impact of the proposed chimney is addressed in a following section.
- 11.77 Landscape and visual assessment - building design The applicant states that a key element of the design brief was to reduce the height of the building and that at 28m the Battlefield EWF is significantly smaller than most other facilities constructed in the UK. The building is also 4m lower than The applicant’s EWF at Chineham EWF which has the same 90,000 tpa capacity as the proposed Battlefield EWF. Facilities able to process larger tonnages of waste require larger heights for the operating equipment. EWF buildings are typically between 40m and 50m in height depending of the type of boiler used and the capacity of the waste bunker. The applicant confirms that the following measures have been incorporated in order to minimise the height of the proposed EFW building:
- reducing the ground level of the boiler hall by 2m (the maximum allowable floor gradient for access by maintenance vehicles);
  - reduction in the height of the boiler structure by routing associated equipment and pipes around the boiler rather than under it;
  - minimising the gap between the external building structure and internal operating equipment to maximise the efficient use of space;
  - reducing the height of the western part of the building to the height of the flue gas treatment equipment to reduce the height of the western façade;

- locating the two grab cranes side by side instead of above one another, as per the design of VES's Chineham plant.

11.78 The applicant states that careful consideration has been given to the orientation of the proposed building. An east-west orientation is considered to be most appropriate in the context of the site's surroundings, including its relationship with the nearby urban and countryside areas and the setting of Battlefield Church and the Registered Battlefield. Physical constraints such as proximity to the existing IWMF building, the relatively small size of the site, the presence of the Battlefield Brook flood plain and the location of the site entrance have also contributed to the selection of the proposed building orientation. With regard to the northern elevation which faces the historic battlefield, the applicant states that a sinuous fluid design has been adopted that includes the green roof above the waste reception area and is designed to reflect the surrounding rolling landscape. It is stated that, other than the chimney, the facility does not break the line of hills as seen from the ridge located on the northern boundary of the Registered Battlefield. Whilst rotating the EWF building 90 degrees would reduce the length of the boiler hall and bunker view from the Battlefield, the applicant states that there would still be an extensive northern façade. Other consequences of reorientating EFW building north-south would include siting the highest point of the building closest to the historic Registered Battlefield and bringing the main operation closer to the rural-urban fringe.

11.79 The principal buildings to be developed as part of the EWF have been assessed against Building Research Establishment's Environmental Assessment Method for buildings (BREEAM) bespoke 2008 criteria. Initial appraisal of the design has established that the buildings achieve a score of 'good'. The EWF buildings incorporate a number of environmental measures:

- all the metallic products are sustainable because of recyclability;
- the green roof is sustainable for its habitat value, insulation properties and storage and balancing of rainfall;
- the polycarbonate is part recyclable and can be made of recycled material;
- rain water collected from the existing Transfer Station roof is and will be used for operations on the whole Battlefield site. The potential for utilising rain water from the roof of the EWF within the existing system will be assessed and developed if workable.

11.80 The applicant is willing in principle to consider extension of the green roof onto the Bottom Ash Hall, Workshop / Storage building and the turbine building. It is considered that the benefits of green roofs mentioned above would justify this. In addition, the applicant has agreed to consider the potential to introduce small scale design features/public art during the detailed design of the landscaping of the southern façade of the building. It is recommended that any planning permission includes a condition to cover these matters.

11.81 Landscape and visual assessment - chimney visibility The proposed 65m high chimney, whilst integrated into the EWF building, would extend for a further 37m above the proposed EFW building. It would be a slender (1.5m wide) light grey structure, similar in height to a typical 400kw pylon but less visible. A line of pylons passes in an east-south-east to west-north-west direction to the north of the Battlefield Link Road, bisecting the historic Battlefield site. The nearest pylon is

located 390m to the north of the proposed EFW chimney. A second pylon is located 490m to the north-east of the proposed EFW building between the A5142 and the railway embankment. The proposed EFW chimney would be seen as a distant vertical feature 1.15km to the south-south-west as viewed from the Battlefield Visitor Centre car park. The two pylons (estimated height 68m) are located 700m to the south and 770m to the south-south-west of the Visitor Centre car park. These would appear to the left and right of the proposed EFW chimney respectively as viewed from this locality and would be more visible. A mobile phone mast (estimated height approx 68m) is located 250m to the south-east of the EFW building and a row of smaller electricity poles (estimated height 28m) extends to within 64m of the eastern margin of the application site. The proposed EFW building and chimney would be seen in the context of these taller masts and pylons from many of the key viewpoints identified in the Environmental Statement.

11.82 Landscape and visual assessment - plume visibility As flue gases cool in the atmosphere the steam they contain condenses and can become visible as a white plume. As the condensed water disperses however the plume stops being visible. Generally, flue gases are more likely to be visible in cold, calm conditions as steam condenses more quickly and disperses more slowly. Longer visible plumes would be generally more likely in the winter than the summer and in mornings rather than afternoons. Plume visibility modelling has been undertaken using weather information from Shawbury recorded between 2003 and 2007 (excluding hours of darkness). A small visible plume between 0 and 210 m in length is predicted for a maximum of 46% of the daylight hours of the year. The average visible plume length would be 36m and over 95% of the visible plume lengths would be less than 100 m. Visible plume lengths of greater than 200 m are only predicted to occur at a maximum for two daylight hours per year and the number of plumes that will occur outside the site boundary will also be very small. There are no predicted visible plume groundings. The applicant states that cloud cover will significantly reduce the visual impact of the plume, because of the similar colour background the cloud presents to the observer. The applicant therefore concludes that the impact of the plume visibility would be low. This general conclusion is accepted, although it is acknowledged that there would be occasional times when the presence of a visible plume would be an identifying visual feature contributing to the overall visibility of the site.

11.83 Landscape and visual assessment - design precedent English Heritage has expressed concerns that if the current EFW proposals should not be seen as establishing a precedent for construction of other taller industrial buildings within the estate. This is given the potential for cumulative impact on the setting of the historic battlefield site. It is recognised however that a number of exceptional circumstances apply to the current proposals:

- The proposed EFW has the potential to form an essential part of Shropshire's future municipal waste management infrastructure, providing a local solution for residual municipal waste derived in Shropshire;
- At present, residual municipal waste would continue to be disposed of by landfilling if the current EFW proposals do not proceed. The applicant advises that this would have significant financial implications to the Shropshire taxpayer given the increasing cost of landfilling under the Landfill Tax Scheme;

- Continued landfilling would also have environmental / climate change implications. This would occur for instance through a requirement for continued HGV transportation to more distant landfill sites and through generation of methane by decomposition of waste in landfills.
- Consideration of alternatives in the Environmental Statement has not been able to identify any alternative sites or technologies which would comply with relevant criteria for managing Shropshire's residual municipal waste. PPS10 specifically recognises that buildings required for future waste management are likely to be larger in size, and stresses the role which high quality design can have in mitigating visual concerns.

11.84 The special circumstances affecting the current proposals are acknowledged. It is not considered however that this would establish a wider precedent for construction of taller buildings within the business park. Existing development on the estate typically has heights of between 9 and 14 metres. There is no evidence to suggest that the types of use planned for currently undeveloped plots would require heights in excess of this. Three recently constructed business units adjacent to Vanguard Way commencing 70m to the south of the current application site have heights of the order of 9.5m. It is recognised that although the EWF process requires a larger building, the proposals have been designed to a high standard in accordance with PPS10 and incorporate features and screening to reduce visual impact. The conclusions of the Environmental Statement with regard to landscape and visual considerations are generally accepted

11.85 Landscape and visual assessment – conclusion The proposed EWF building would be tall in comparison with other existing and planned buildings on the business park, but has been designed to a high quality. The upper part of the EWF building also incorporates design elements which seek to reduce its visual impact from longer-distance views, including the Battlefield Heritage Site. It is acknowledged that existing and planned vegetation and buildings would be capable of screening and filtering views towards the site from the north. It is also acknowledged that views towards the site from other locations including the built up areas to the south would be limited, and that the site would be seen as an industrial building in an industrial context as viewed from adjacent areas within the estate. The buildings comprising the EWF would occupy a similar surface area to the existing waste transfer building and would be comparable in surface area to other nearby industrial buildings including Stadco to the west, Firmin Coates to the south and ABP to the east.

11.86 It is considered that the applicants' updated photomontage exercise provides further validation of the conclusions of the landscape and visual appraisal. Mitigation measures including landscaping would provide additional reassurance in relation to landscape and visual impact. On balance, whilst the prominence of the building and chimney are acknowledged, it is not considered that the visual impact and effects on the landscape impact would be unacceptable, or that refusal on landscape/visual grounds could be justified. Notwithstanding this, English Heritage initially maintained an objection to the proposals on the basis that the building would remain visible from key viewpoints within the historic Battlefield site. Cultural heritage is discussed further in the succeeding section.

## CULTURAL HERITAGE

- 11.87 Planning Policy Statement 5 (March 2010) advises (in HE9.1) that in considering applications local planning authorities should 'seek to identify and assess the significance of any element of the historic environment that may be affected by the relevant development (including development within the setting of an asset). Account should be taken of the particular nature of the interest in the asset and the desirability of enhancing the significance of heritage assets, securing their conservation for the longer term and utilising their positive role in place making' (HE9.4). 'The more significant the heritage asset, the greater the presumption should be in favour of its conservation' (HE10.1). 'Material loss of heritage assets of the highest significance, including amongst other matters scheduled battlefields should be wholly exceptional' (HE10.2). Saved policy HE13 of the Shrewsbury & Atcham Borough Local Plan also states that planning permission will not be granted for development which would destroy or adversely affect the topographical authenticity, visual amenity, or archaeological integrity of the site of the Battle of Shrewsbury (1403).
- 11.88 The cultural heritage assessment accompanying the applicant's Environmental Statement concludes that the proposals would have a minor effect on the Battle of Shrewsbury site 500m to the north and sympathetic planting and screening of the new development would help to mitigate any setting issues. The assessment also concludes that there would be a negligible impact on the historic London & North Western Railway which passes on an embankment 300m to the east of the site. The additional photomontages undertaken by the applicant provide further clarification on the likely appearance of the proposed EWF building as seen from key viewpoints in and around the Battlefield over time. This exercise clarifies the extent to which existing and proposed vegetation and buildings will progressively screen views of the EWF facility over time.
- 11.89 English Heritage initially maintained their objection to the proposals for a further period following completion of the photomontage exercise. They acknowledged that the proposed EWF building would not directly affect the site of the historic Battlefield. However, they advised that the proposed EWF building would remain visible as a landscape feature from areas within the Battlefield site, including the 1403 visitor centre to the north and the viewing platform to the south. English Heritage did not consider that the applicant had placed sufficient weight on the historical significance of the views in question. They advised that the wider landscape setting of the historic Battlefield site, incorporating the current application site, forms an integral part of the context of the site (e.g. PPG15 (2.25); PPG16 (S27)). Following discussions between English Heritage, Veolia has reassessed the proposals and put forward additional tree and hedge planting on land comprising the northern boundary of the Battlefield Link Road (A5124) and in further pockets on the southern fringe of the battlefield and the parking area accessed from this road. This scheme incorporates a mixture of long standard trees, as well as whip planting as a contribution to the early mitigation of the visual effects of the EWF. Having considered such mitigation measures and the company's further justification of the design and layout of the expanded waste management facility English Heritage has withdrawn its objection to the proposals.
- 11.90 As a contribution also to the enhancement of the battlefield site Veolia has confirmed willingness to work with other interested bodies (including English Heritage and Shropshire Council) to support financially and develop a Conservation Management Plan for the battlefield. This will be secured as part of a

legal agreement entered into with Veolia. Elements of the Management Plan will include:

- Funding for a scheme of off-site planting on Shropshire Council owned land adjacent to the A5124 Battlefield Link-Road, with thickening of existing vegetation to the immediate south of the battlefield heritage site in order to provide improved screening and definition of the urban / rural edge;
- Funding for an online educational resource detailing the battlefield;
- Funding to implement improved interpretation and access proposals for the Battlefield site, including enhancements to the existing car park, signage, footpaths, hedging and fencing;
- An annuity payment for the duration of the waste management contract to ensure appropriate management of the registered battlefield site in accordance with agreed principles set out in the conservation management plan.

11.91 In conclusion therefore, it is considered that appropriate mitigation measures are available to ensure that the proposals would not have a significant adverse affect the visual amenity of the site of the Battle of Shrewsbury. Accordingly it is concluded that the proposals can be accepted in relation to relevant development plan policies including policy HE13 of the Shrewsbury & Atcham Borough Local Plan and relevant heritage guidance in PPS5.

#### TRAFFIC AND TRANSPORT

11.92 Traffic and transport - highway capacity The site has good access to the nearby primary road system, including the main north-south and east-west transport axes running through the County. It is well located to serve the heavy vehicle traffic generated by the facility linked to the collection and delivery of waste. It is also well located for individual householders delivering waste to the Household Waste and Recycling Centre from the Shrewsbury area and the southern part of North Shropshire. The site is within a general area allocated for employment use in the Shrewsbury & Atcham Borough Local Plan. Were another industrial / employment use to become established on the site, it would potentially be capable in principle of generating a similar or greater number of heavy vehicle movements. The site is also adjacent to an area which has been designated as suitable for a rail freight terminal in the Shrewsbury & Atcham Borough Local Plan.

11.93 The proposals have attracted objections from local people and businesses regarding the capacity of the local road system. The Environmental Statement includes a Traffic Assessment (TA), which considers the ability of the local roads to accommodate the traffic likely to be generated by the proposals. The TA states that the Battlefield Link Road and the internal roads within the Battlefield Enterprise Park have been designed to accommodate the full development of the area, and operate well within capacity at present. The TA acknowledges that the proposed facility would create additional HGV movements relative to the levels generated by the existing site. However, given the integration of the proposed EWF with the existing WTS, the assessment states that any increase in HGV numbers would not be material and could not be viewed as creating highway capacity issues or road safety effects. Overall the assessment concludes that the traffic impact of the current proposals would be limited. It is further stated that if the operator pursues a policy of backloading wherever possible then the change in HGV movements

would be negligible. This could be achieved for example by ensuring that, subject to management issues, vehicles carrying ash from the site are re-loaded with bulked-up municipal waste collected from other Shropshire waste transfer stations before re-entry site.

11.94 The assessment advises that the number of accidents on the local highway network involving HGVs is very small, that the road infrastructure around the site was designed with HGV movements in mind and the site has good links to the wider strategic network. Notwithstanding this, the applicant has also agreed to enter into a routing agreement based on previous commitments to manage HGV traffic to and from the site and to review the company's Travel Plan given that additional staff would be employed at the site. Further clarification has also been provided in relation to the following highway matters:

- i. A breakdown has been provided of projected future HGV movements into recycling, municipal and commercial / industrial waste over the planned design life of the facility. It is stated that there will be no increase in the importation of dry recyclates from satellite recycling centres if the proposed EWF facility is developed. For example, levels of imported dry recyclates are set to fall upon completion of the expansion of the Craven Arms Integrated Waste Management Facility which is scheduled for 2010. Levels of commercial and industrial waste are also predicted to fall progressively from 11.4 loads per business day in 2008 to 3.9 loads in 2031.
- ii. Confirmation has been provided that the predictions of HGV movements in the traffic assessment take account of the intention to commence importation of kitchen waste and plastic (from extension of the kerbside collection scheme) to the existing transfer station at Vanguard Way. Veolia state that these changes will occur as part of the development of the Shropshire integrated waste management strategy and are scheduled to be implemented regardless of the outcome of the current application.
- iii. The applicant has emphasised that HGV movements associated with export of ash when the EWF is developed would be lower than those of bulked residual waste taken from the IWMF if the EWF is not developed.
- iv. Residual municipal and commercial waste delivered to the satellite IWMFs would be transferred to the EWF by articulated lorries instead of being delivered to landfill. This would increase traffic to the site in 2013 by around 12 one-way movements per business day if there is no backloading. However, the EWF would reduce the volume of the waste it receives which would in turn reduce the number of articulated lorry movements leaving the site by 1 load. Consequently, there would be an increase of 11 one-way movements by articulated lorries per business day in 2013 relative to the current situation if there is no backloading. A further increase of 4 one way movements per business day is forecasted for 2022 (due to increased recyclate and composting volumes to and from the site). The traffic and transport assessment concludes that this increase is not material and could not be viewed as creating highway capacity or road safety impacts. The applicant states that additional proposed improvements to internal circulation and HRC stacking would support this conclusion by improving traffic flows at the Battlefield Site.

- v. Veolia advise that they currently operate a policy for the movement of materials via approved routes at off peak hours in order to ensure the efficient flow of traffic at the Battlefield site and surrounding area. The applicant intends to continue this policy and would accept the principle of extending this to cover any additional industrial and commercial vehicles.
- vi. All HGV traffic would access the site from the A5124 Battlefield Link Road with the exception of refuse collection vehicles collecting from the Shrewsbury area. The applicant has indicated a willingness to enter into a Legal Agreement to this effect. With the exception of site staff car and maintenance van movements (which the applicant states are insignificant in the context of overall traffic volumes on the surrounding road network), levels of public car traffic accessing the site will remain as currently approved.
- vii. The applicant does not anticipate that planned extension to the existing HRC facility would lead to an increase in throughput. The facility would continue to serve the same population. The intention is to increase the number of recycling bays which will reduce waiting times and therefore queuing by the public to access the facility. It is further stated that proposed changes to internal circulation would allow separation of public vehicles and HGVs which would improve traffic flows and further reduce queuing.
- viii, The applicant states that they wherever possible backloading will occur to avoid empty vehicle movements. It is stated that this not only reduces carbon emissions but also provides a financial cost saving. The applicant is also undertaking trials of hybrid vehicles and the use of alternative fuels to power collection vehicles. Depending on the outcome of such trials it is possible future deployment of such vehicles will occur. An overall Transport Plan would form part of the legal agreement to accompany any planning permission in the event that the current application is permitted.
- ix. The applicant is willing to accept a planning condition requiring implementation of a Travel Plan for the proposed site to encourage sustainable modes of transport. This would be reviewed at least annually with specific reference to staff and visitor transport practices in order to minimise local and global impacts. Approximately 20 staff are employed at the Battlefield site most of whom live within a 10 mile radius. The current proposals would increase this by approximately 20 people. It is stated that staff regularly utilise hot desk facilities to minimise vehicle mileage and on occasion work from home. The applicant states that best practices would be employed during construction and operation, for staff, operatives, suppliers and visitors, such as providing bike spaces as well as car pooling arrangements for staff and encouraging staff to take public transport.

11.95 The existing planning permission for phase 1 of the site includes a condition requiring that the amount of waste material imported to the facility does not exceed an annual maximum of 110,000 tonnes. It is considered that an equivalent restriction should apply to the current proposals. Subject to this and to the imposition of a routeing agreement to manage HGV traffic to and from the site and implementation of a Company Travel Plan and an overall Transport Plan it is considered that the proposals are capable of complying with the relevant planning

policies relating to traffic issues. (Structure Plan policies P35, P68; SAB Local Plan policies GP1, T1, WLP policy P4, P5, P12, P26, P28).

11.96 Traffic and transport – strategic waste management The proposed EWF forms part of an integrated plan for the whole of the Shropshire PFI contract which is designed to maximise efficiencies with regard to waste collection and delivery in accordance with the Proximity Principle, with corresponding reductions in carbon emissions. The applicant states that the central location of the EWF in conjunction with outlying satellite IWMFs in Oswestry, North Shropshire, South Shropshire and Bridgnorth areas would provide major transport efficiencies for the integrated management of waste within Shropshire. Residual waste would otherwise have to be transported significantly greater distances for treatment/disposal if the Battlefield site was not used. The applicant states that this hub and spoke approach, of which the EWF is a key aspect, forms a core part of the Shropshire integrated waste management plan. The applicant also cites the following specific improvements in waste collection/delivery arrangements and associated carbon efficiencies:

- Construction and expansion of satellite IWMFs elsewhere in Shropshire. Oswestry IWMF has been constructed, the expansion of Craven Arms IWMF is scheduled for completion by April 2010 and a further IWMF is to be constructed in the vicinity of Bridgnorth. This policy ensures that the distance travelled by collection vehicles is minimised. Instead bulked residual and recyclable material is transported more efficiently by larger articulated vehicles (able to carry more than double the weight of a collection vehicle) to the ultimate destination of the waste.
- Collection of waste across District boundaries. Clinical waste collections have been altered to collection by one vehicle that delivers to the Battlefield site. Previously five separate collection vehicles were used for this service. Use of the Battlefield site as a central facility able to accept wastes from outside of the Shrewsbury area continues to be developed where transport efficiencies can be gained
- The collection of bulky wastes by vehicles operated by district furniture schemes has reduced the requirement for special one off trips to be made to provide this service, thereby improving the efficiency of waste collections that utilise the Battlefield site.

11.97 Traffic and transport - internal circulation The applicant states that the current queuing and user parking system has been in effective operation for 5 years and has been developed with the benefit of operational experience to provide the most efficient traffic flows. This will be improved by the extension of the HRC that will increase the number of parking spaces in the HRC recycling area, thereby increasing the offloading capacity and reducing queuing times. The applicant states that these proposed internal layout changes will also achieve improved separation of public and HGV vehicles. Experience operating the existing HRC suggests there are likely to be a limited number of occasions when flows reached the level where stacking occurred within the site. On this limited number of peak days, it is anticipated that staff would provide extra assistance to residents with parking and unloading their waste to reduce the period of stay. The applicant states that the design philosophy for the HRC aims to allow flexibility of operation to allow adaptation to changes in the types of waste received and legislation governing how such waste is managed. For example, the number of bays available for green waste will be changed depending on the time of year to accommodate increased tonnages in the

summer and autumn.

- 11.98 The applicant advises that the Health and Safety aspects of the proposed HRC layout and EWF have been considered in conjunction with relevant legislation. It is proposed to maintain the current system for vehicle queuing that is in place at the HRC. This involves filtering of the two one-way traffic lanes into one lane prior to entry into the existing HRC building. During busy periods, users will be directed to a parking bay by staff upon entry to the HRC, as is current practice. The applicant states that operational experience has confirmed this system does not require the use of a stacking system controlled by gates or traffic lights. The existing HRC design does not physically prevent members of the public from accessing the existing HRC building from the wrong entrance. The proposed amendment to the HRC would introduce a change of level between the inbound and outbound loops of the one-way system which would prevent this. The same herringbone parking layout would apply in the proposed HRC extension as currently applies in the existing HRC and an equivalent width would be provided for reversing. The current parking system allows vehicles to reverse up to the porthole closest to the existing HRC exit without preventing egress from the facility. With regard to the skip bays closest to the EWF building, clear road lining and site management procedures will ensure that the exit lane from the site will not be blocked at any time. The applicant does not therefore consider there to be any issue associated with vehicles reversing up to the bays or exiting the Transfer Station building.
- 11.99 The width and construction design of the estate roads of the Enterprise Park and internal circulation arrangements are also such that all types of traffic ranging from HGV's to householder vehicles can be accommodated without adverse effects on the road network or the amenities and working environment of occupants in adjoining properties. Leith Planning has expressed concerns that their client (Morris Property) could suffer from lack of access from the repositioned roundabout (which provides access to the Waste Management Facility). The Council as landowner is continuing to have negotiations with Morris Property in relation to this matter, to ensure that the development takes into account the needs of all parties. It is considered that the internal design of the site and the access roundabout is satisfactory and will allow improvements relative to the existing situation. (Structure Plan Policy P68; SAB Local Plan Policies GP1, EM1; WLP Policy P26).

### AIR QUALITY

- 11.100 Air Quality Assessment The Environmental Statement includes an air quality assessment which considers the implications of the proposed EWF for air quality and whether any atmospheric emissions have the potential to cause harm. The assessment focuses on pollutants governed by the Waste Incineration Directive. Background air quality and health impacts are also considered. At present, it is stated that airborne pollutant concentrations in the area of Shrewsbury meet all relevant Air Quality Strategy objective values and the pollution climate is typical of similar locations in the UK. It is predicted that emissions occurring during the operation of the EWF would result in small increases in ground level pollutant concentrations including NO<sub>2</sub>. However, the selected chimney height of 65 metres would be sufficient to ensure adequate dispersion. The assessment predicts that even in the worst case scenario the combination of background pollutant levels and emissions from the proposed EWF would remain significantly below the relevant threshold criterion for the protection of human health.

- 11.101 Air quality - abatement The applicant states that the abatement technology proposed is well proven and similar in design to that used at Veolia's operational EWFs. The applicant is required to monitor emissions on a half hourly and daily basis at each of its EWFs. It is stated that for a total of over 1 million reporting periods in 2008 Emission Limit Values were exceeded on just 2 occasions and by just 2% (one SO<sub>2</sub> half hour limit and one daily NO<sub>x</sub> limit). Accordingly Veolia state that any potential associated impact on the environment would be insignificant. A summary of the monthly average emissions for each EWF is posted on the company's website. The Environmental Permit which was issued by the Environment Agency in June 2010 requires off-site monitoring in accordance with an agreed methodology to ensure that there is no adverse impact on local pollutant concentrations. Objectors have however expressed concerns that the proposed emission control and monitoring systems may not cover all residues from incineration, for example, dioxins, furans and fine particle emissions (e.g. PM<sub>2.5</sub>s).
- 11.102 Emissions from modern incinerators are required to be compliant with the requirements of the Waste Incineration Directive (WID) as regulated by the Environment Agency through the site's Environmental Permit (EP). The Environment Agency specifies which pollutants are monitored, taking into account the requirements of the WID. Where possible, continuous on-line monitoring is undertaken using the Continuous Emissions Monitoring System (CEMS). Where pollutant concentrations are too low to be monitored by CEMS, stack testing is undertaken at regular intervals. The CEMS monitors the emissions of total particles/dust, volatile organic compounds (VOCs), hydrogen chloride (HCl), carbon monoxide (CO), sulphur dioxide (SO<sub>2</sub>), oxides of nitrogen ('NO<sub>2</sub>'), ammonia (NH<sub>3</sub>) oxygen (O<sub>2</sub>), and water vapour (H<sub>2</sub>O). It will also record temperature, pressure and the flue gas flow. The Waste Incineration Directive requires dioxins, furans and heavy metals to be monitored by analysing samples of exhaust emissions from the stack every three months for the first 12 months of operation and at six monthly intervals thereafter. The applicant states that the monitoring to be undertaken at the EWF is appropriate, robust and would be the same as that which is carried out at other similar facilities in the UK and across the European Union.
- 11.103 The proposed EWF incorporates the most up to date abatement equipment and has been designed to comply fully with the emission limits set by the Waste Incineration Directive. Notwithstanding this, the abatement plant would be capable of being upgraded through the Environmental Permitting process if future legislation requires a further reduction in emission concentrations. Veolia states that its facilities at Tyseley and SELCHP were commissioned in the mid-1990s prior to introduction of the Waste Incineration Directive (WID) and both were subject to enhancement / upgrade to meet the lower WID Emission Limit Values (ELVs), primarily for NO<sub>x</sub> emissions but also to meet the half hourly reporting periods. Subsequently, the capacity of the fabric filter at the SELCHP facility was increased in order to reduce gas flow velocity and improve the efficiency of the acid gas abatement, with a consequential reduction in lime consumption.
- 11.104 Air quality – plume dispersion The dispersion of flue gas has been modelled using accepted methodology. Average operating conditions have been assumed using meteorological data from Shawbury between 2003 and 2007. The computer model (ADMS) takes account of hourly changes in atmospheric stability rather than

averaging these out over the year. The model also takes account of local topography and the effect of turbulence from the proposed EWF buildings. The applicant states that this has led to a more accurate representation of local conditions and potential worst case impacts.

- 11.105 Air quality - photochemical ozone The applicant has advised that the facility would not contribute to increased levels of photochemical ozone over Shrewsbury. If the wind blows from the facility towards Shrewsbury during sunny weather it is advised that nitric oxide (NO) from the facility would be expected to react with existing ozone to form nitrogen dioxide (NO<sub>2</sub>). Therefore, it is stated that in such circumstances ozone concentrations over the residential areas of Shrewsbury would be likely to reduce. A Best Available Technology (BAT) assessment undertaken as part of the Environmental Permit application also concludes that the EWF technologies proposed offered one of the lowest potentials for generation of air pollution, including levels of NO<sub>x</sub> and creation of photochemical ozone.
- 11.106 Air quality – start up and shutdown The Waste Incineration Directive (WID) acknowledges that emissions will be relatively elevated during periods of start-up and shutdown. However, the applicant states that these periods would be of short duration and would not have a significant effect on local air quality. The applicant cites a November 2008 report prepared by AEA Technology. This concludes that although higher concentrations and higher emission rates of dioxins are observed during start-up and shutdown periods, these are less than one order of magnitude higher relative to normal operation and will be similar on average to what would be released during normal operation over the same period.
- 11.107 The assumed operational availability of 85% suggests down-time of around 50 days per annum for the EFW. However, the applicant advises that this would typically incorporate a week long and a two-week planned shut down each year, hence the number of shut down - start-up cycles would be correspondingly reduced. The applicant advises that whilst some periods of unplanned maintenance can be expected, a computerised maintenance management system would allow plant availability to be maximised. The waste storage bunker would provide approximately four days storage. During a typical planned shutdown direct delivered waste would continue to be received at the EWF whilst residual wastes from satellite IWMFs would be directed to alternative locations. In the event of an extended shutdown where bunker capacity is reached, the plant has the facility to be used as a transfer station.
- 11.108 Air quality – ash handling The applicant has confirmed that ash and flue gas treatment residues would be treated in a fully contained way to avoid the risk of windblow and spillage. Bottom ash would be quenched and handled by a water / air tight ash discharger unit which is robust and capable of being easily maintained. The bottom ash is stored within the EWF building before transfer to bulk haulage vehicles for transport to a suitable bottom ash recycling facility which the company are seeking to develop. The system would also collect any fine ash which falls through the grate openings. Flue gas treatment residues would be captured by a bag filtration system and transported to a fully enclosed storage silo within the EWF building by conveyor. The residues would then be discharged to powder tankers via a sealed discharge connection.
- 11.109 Air quality – fugitive emissions and odour from stored waste The applicant states

that the proposed facility has a number of inbuilt safeguards to minimise odour and fugitive emissions. The tipping hall would be fitted with a roller shutter door which would remain closed except when waste is delivered. Fans drawing air to feed the combustion process would also maintain the waste reception hall at a negative pressure. Odours and airborne dust would be drawn from the tipping hall and the waste bunker into the incineration lines. The applicant does not therefore anticipate that an air filtration system would be required. The Environmental Permit would impose detailed controls relating to issues such as waste turnover, building cleaning, regular visits by pest control personnel, regular inspection of sewers, culverts etc, transporting waste in sheeted lorries and effective site management. The current waste transfer building incorporates a dust suppression system which can be adapted to emit a deodoriser. It is considered that a similar system should apply for the tipping hall. A number of other measures are available to reduce and manage odour emissions, including:

- ensuring waste transfer and storage operations are well contained (i.e. within the transfer building);
- minimising waste storage times prior to transfer and managing waste on a first in, first out basis;
- temperature control to limit any increase in microbiological activity during warmer weather;
- keeping potential odour sources into one single location where they are easier to manage;
- keeping doors closed, commensurate with health and safety, and use of rubber doors or plastic strips where the frequency of loading/unloading precludes this;
- designing buildings and door locations to avoid through-drafts;
- increasing the separation distance between an odour source and a receptor;
- regular monitoring of odour and review of the effectiveness of mitigation measures.
- installation of an odour abatement system including use of deodorising spray mists / powders

It is considered that the above measures, which can also be the subject of further detailed schemes under the terms of a planning permission, would allow fugitive emissions and odour from stored waste to be controlled to an acceptable degree in this location.

- 11.110 Air quality – dust The assessment concludes that any nuisance due to dust would be insignificant during construction, given that there are very few residential properties or receptors within close vicinity to the proposed EWF. The Environmental Permit would control dust in the operational phase. The applicant states that best practice in dust control would be followed through-out the construction process and subsequent operation. The design and the nature of the proposals would also provide inbuilt safeguards such as the proposed concrete surface of the yard, which is capable of being maintained in a clean condition and the fact that the majority of operations would take place under cover within the proposed building.
- 11.111 Planning permission was granted by the former Shrewsbury & Atcham Borough Council for a food enterprise centre on adjacent land which is potentially sensitive to air quality issues and an area to the west of the current application site has recently been developed for this purpose. The permission for the current waste management building makes specific provision for installation of an air extraction and filtration

system if necessary. The applicant has stated that this would not be necessary for the proposed EWF as a negative pressure air management system would apply which directs air and any entrained dust / particulates from the tipping hall towards the burning area. Additional operational controls are available to provide added reassurance. The Council could seek agreement on schemes for:

- maintaining the yard in a clean condition by sweeping as necessary;
- covering any waste capable of generating dust if it is stored in the open;
- all transfer of waste to take place under cover;
- wheel cleaning as necessary;
- installation of a spray mist dust suppression system within the transfer building;
- use of water on circulation areas to suppress dust during dry conditions.

In addition, detailed controls would be exercised by the Environment Agency through the Environmental Permitting regime. It is considered that appropriate mitigation measures are available to effectively control dust and airborne particulates at the site.

- 11.112 Air quality – vehicle fumes A number of safeguards can be imposed to ensure that fumes from vehicles operating within the site do not result in an unacceptable deterioration in local air quality. These include requiring that the engines and exhaust systems of all plant/vehicles operating within the site are maintained in full accordance with manufacturer's recommendations and limiting plant and processes taking place within the site to those identified in the application, with no additional plant or processes unless otherwise approved. Such measures can be incorporated as conditions on any planning permission. Further detailed controls would be applied through the Environmental Permitting process.
- 11.113 The majority of the traffic envisaged under the current EWF proposals is already being generated by the existing Battlefield waste management facility. There would be the potential for some increased HGV movements due to the receipt of bulked up municipal waste from satellite waste management sites. However, if backloading is employed then the level of HGV movements would not increase materially relative to the levels anticipated for the current facility. The applicant has confirmed that it would employ backloading wherever practicable. In terms of overall HGV movements the proposed EWF would avoid the need to export waste to more distant landfills with consequent potential for increased vehicle emissions. It is not considered that the current proposals would result in a material increase in vehicle emissions relative to the current situation.
- 11.114 Air quality – conclusion Concerns have been expressed by objectors that the EWF proposals could reduce air quality. However, the EWF would employ up to date emission control technology with a proven track record. Emissions would be monitored on a half hourly basis and a computer controlled abatement system would respond automatically to the monitoring results. This would ensure that emission limits are not exceeded and the proposals remain acceptable in terms of relevant human health considerations as considered below. Experience with other operational EFW's indicates a high degree of confidence regarding the ability to comply with relevant emission limits. Detailed controls would be exercised through the Environment Agency's permitting regime. The Environment Agency and Public Protection have not objected to the proposals and the Environment Agency issued a permit to allow operation of the facility subject to planning permission in June 2010. It is not considered that refusal on grounds of air quality could not be substantiated in

these circumstances. (Structure Plan Policy P16; WLP Policies P4, P25; SAB Local Plan Policies GP1, INF4).

## HEALTH AND AMENITY

- 11.115 Health and amenity – human health assessment Concerns about the health effects of the proposed EWF are prominent amongst objections to the scheme. The Environmental Statement includes an assessment of human health effects resulting from short-term exposure to some of the substances emitted by the proposed EWF. The assessment concludes that the health effects associated with emissions of NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> from the EWF are very small and substantially less than the potential health effects which can result from normal background variations in the level of atmospheric pollutants. The combined effect of emissions from the EWF and background pollution is also predicted to remain well below recommended health limits. The assessment considers the impact of dioxins/furans and metals released by the EWF on the health of the local population at the point of maximum exposure and within a 10 km radius of the proposed EWF. These substances are ‘persistent’ in the environment and have several pathways from the point of release to the human receptor. The assessment concludes however that, at the levels anticipated, emissions of metals and dioxins from the EWF are not significant for the most conservative and worse case scenario and would not pose a significant risk to human health, either through inhalation or by ingestion of foods.
- 11.116 The health assessment was based on the most up to date methodology and literature at the time of the assessment. This includes a draft report dated July 2007 from COMEAP (Committee on the Medical Effects of Air Pollution) on long term exposure to air pollution. The COMEAP report was updated in June 2009 but the applicant states that the conclusions of the updated report do not materially change the assessment of health effects as presented in the Environmental Statement. In September 2009 the Health Protection Agency (HPA) published a position statement reviewing research undertaken to examine the suggested links between emissions from Municipal Waste Incinerators and effects on human health. This included the results of an earlier study by DEFRA in 2004 which considered the comparative impacts on health of different methods of waste disposal. The HPA updated this report as an advice note in February 2010, taking account of the understanding and evaluation of the current scientific evidence. The HPA conclude:

‘While it is not possible to rule out adverse health effects from modern, well regulated municipal waste incinerators with complete certainty, any potential damage to the health of those living close-by is likely to be very small, if detectable. This view is based on detailed assessments of the effects of air pollutants on health and on the fact that modern and well managed municipal waste incinerators make only a very small contribution to local concentrations of air pollutants. The Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment has reviewed recent data and has concluded that there is no need to change its previous advice, namely that any potential risk of cancer due to residency near to municipal waste incinerators is exceedingly low and probably not measurable by the most modern techniques. Since any possible health effects are likely to be very small, if detectable, studies of public health around modern, well managed municipal waste incinerators are not recommended.’

- 11.117 Objectors concerns about potential health effects of the EWF proposals, both directly and through ingestion of food are acknowledged. However, guidance by the Health Protection Agency and DEFRA advises that there is no evidence of a link between municipal EWF emissions and detectable health impacts. The detailed technical measures which would be employed to ensure that emissions remain well within recommended levels are referred to in the previous section. The Environment Agency who would be responsible for controlling emissions from the proposed facility under the PPC permitting procedure has not objected to the proposals. Nor has the Primary Care Trust. Whilst the concerns of objectors in relation to health issues are acknowledged it is not considered that refusal on health grounds could be justified in these circumstances.
- 11.118 Noise and vibration The Environmental Statement includes an assessment of noise and vibration from the proposed EWF, taking into account the existing noise environment, the proposed facility design and established noise assessment methodology. The assessment concludes that the potential impact with regard to noise from the operations on site and the additional vehicle movements to and from the site will not be significant. Construction noise and vibration will be controlled to acceptable levels via control on hours of working and liaison with the local authority. The majority of operations capable of generating noise would take place within the proposed EFW Building, which would result in significant noise attenuation. The site is remote from residential property and the noise predictions in the Environmental Statement do not indicate that the proposals would have a material adverse effect on the general level of exposure to industrial noise at the nearest properties.
- 11.119 Background noise levels have been surveyed at four locations surrounding the proposed site (860m north, 345m east, 615m south west and 150m west (non-residential)). The assessment uses established methodology in BS4142 to predict the levels of noise from the proposed facility at the survey locations both during construction and subsequent operation of the EWF. The model takes account of noise from construction and operation of proposed building and from traffic associated with the proposed development, and the fact that the facility would operate for 24 hours a day. It is predicted that noise and vibration levels would remain below all adopted limits during construction, ensuring that there is no unacceptable impact on the closest sensitive receptor locations. Operational noise levels have been calculated at receptor locations assuming a noise level of 53 dB LAeq at the boundary of the site, as agreed with Public Protection (Environmental Health). Corresponding predictions of noise levels at the receptor locations indicate noise levels at two out of three residential locations as within the criteria proposed by Public Protection. The assessment also presents further evidence to demonstrate there would be negligible noise impact at the third location, to the north.
- 11.120 The potential for operational vibration has been assessed, taking account of similar assessments at comparable sites. It is concluded that there would be no significant impact from vibration at any of the closest receptor locations. No construction piling is proposed. The assessment also concludes that any increased traffic associated with the proposed development would not have a significant effect on environmental noise levels on the roads surrounding the site. The conclusions of the Environmental Statement in relation to noise and vibration are accepted given the work undertaken and the nature and location of the site. To provide added reassurance however it is recommended that an appropriate noise mitigation condition is imposed on any planning permission.

- 11.121 Pests There is the potential for pest / vermin infestation since the waste handled at the site will contain food. The proximity of the proposed Food Enterprise Centre emphasises the need for strict control measures to discourage pests/vermin. The applicant states that waste will arrive in contained vehicles and be located in a dedicated bunker with the majority of contents processed on a weekly basis. A pest control contractor would also be engaged as a requirement of the Environmental Permit, to monitor for signs of pests / vermin and to take action as appropriate. Appropriate measures are available to minimise and control the risk of pests and vermin and it is considered therefore that the proposals should not give rise to problems with pest/vermin if proper standards of management are maintained. However it would be advisable for the management measures detailed above to be restated in any planning permission granted subject to appropriate liaison with the Environment Agency.
- 11.122 Mud on roads All internal access routes within the site would be hard surfaced and a road sweeper would be employed as necessary during the construction phase. It is also recommended that a wheel-wash is provided during construction to prevent mud from being carried onto the circulation area of the existing waste management site or the adjoining highway.
- 11.123 Litter Waste would be delivered in enclosed vehicles and discharged under cover within the tipping hall. Therefore, The applicant does not anticipate any problems with litter. A litter control condition would however form a requirement of the Environmental Permit.
- 11.124 Wind A wind assessment has identified that both northerly and southerly winds have the potential to occasionally cause wind velocities to be sufficiently high to cause wind-blow of litter and potential for pedestrian discomfort whilst using the extension to the HRC in the area closest to the main EWF building. Two mitigation measures are proposed:
1. ensuring that waste disposal bins in this area are designated for heavy materials (e.g. hardcore) to avoid the risk of wind-blow; and
  2. providing a screen along the eastern end of the HRC extension to mitigate against impacts on pedestrians.
- The screen would need to be of the order of 5 - 7.5m wide by 5m high and slatted to allow some wind to pass through, thereby avoiding faster flow streams being created around the edges. Whilst a screen would increase wind velocities away from the HRC this would not affect the HRC extension.
- 11.125 The wind modelling has also indicated the possibility of excessive wind velocities on the northern side of the HRC extension during periods of northerly wind, where wind impacts on the raised edge of the loading bay. This should not be a problem provided that the skips are located relatively close to each other. Additional temporary screening would be provided if necessary between skips on the northern side (away from the HRC). No impacts on proposed landscape planting in the vicinity of the EWF building were identified. All cladding and structures would comply with relevant BSI Standards to ensure a safe structure is built. The chimney is designed to meet the BSI Standards for Chimney Design, which considers all climatic conditions that may be encountered by such a structure. It is considered

that the above measures would be capable of preventing excessive wind velocities and associated amenity impacts for users of the HRC extension.

- 11.126 Hours of Operation The proposed EWF would operate 24 hours a day except for planned and unplanned maintenance. However, waste would generally not be delivered outside of normal daytime working hours. The tipping hall would include a sufficient capacity of waste to provide a feedstock for the facility during nighttime hours. The hours of working for the Household Waste Recycling Centre would not be changed relative to the current situation. Restricted hours of working would apply during the construction phase. The proposed site is located in an established industrial area served by roads with adequate spare capacity, and is remote from residential property. The design of the site, including the fact that following commissioning of the proposed EWF the majority of operations would take place under cover, should also ensure that there are no unacceptable adverse effects on the nearest residential properties. It is recognised that the EWF would be a seven day week, 24 hours a day operation but this is not uncommon to a number of activities/uses in the Harlescott / Battlefield areas and it is considered that there would not be an unacceptable effect on the amenities of the general neighbourhood.

### ECOLOGY / NATURAL ENVIRONMENT

- 11.127 Relevant wildlife legislation and associated development plan policies require that particular care is taken in protected species, habitats and sites. The legislation generally requires that permission is refused if the development is likely to have an unacceptable adverse effect on protected species, habitats of sites which can not be satisfactorily mitigated. The current proposals raise a number of issues with respect to protected species and sites which are discussed below:
- 11.128 Ecological Impact Assessment The Environmental Statement identifies potential significant impacts from construction of the EWF on vegetation within and surrounding the site, Battlefield Brook, badger, bats, great crested newt, breeding birds and reptiles. Mitigation measures are however proposed to minimise and, where possible, remove the potential for significant ecological impacts. The potential for some residual impacts would remain after mitigation, but the assessment concludes that these would be extremely unlikely. The main potential for a significant residual impact relates to badgers, but is dependent on whether the sett is still active at the time construction commences. The badger sett would be checked prior to construction. If the sett is found to be active, a licence may be required for development works to commence. The application involves provision of an additional pond for great crested newts. The Ecological Impact Assessment concludes that the potential for residual significant negative impacts on great crested newts through loss of foraging habitat also remain, although this relates to cumulative impacts due to the construction of a Food Enterprise Centre immediately adjacent to the proposed EWF site. The applicant has prepared a method statement outlining how wild bird nests and reptiles will be protected during the site clearance work. The applicant states that vegetation in the river corridor will continue to develop and provide more cover which would be beneficial to wildlife movement. Some sections may require strimming once every 3 years to control bramble spread.
- 11.129 Ecology – Protected Sites There are no statutory designated sites for nature conservation within the proposed development site, although there is one Ramsar site and two SSSIs within 2 km of the site boundary, and the Rea Brook Local Nature

Reserve lies within 5 km to the south. There are no non statutory designated sites within the site boundary, but three local wildlife sites lie within 2 km. There will be no significant negative impacts on the surrounding protected sites from construction activities due to their distance from the development site.

- 11.130 Ecology – Habitat Regulations Assessment The Ecological Impact Assessment identifies the potential for significant impacts on surrounding designated sites and vegetation within the zone of influence of the EWF. There are a number of Ramsar sites in the area surrounding the site. These are wetlands of international importance designated under the Ramsar Convention. Accordingly this application must be considered under the Habitat Regulation Assessment process in order to satisfy the Local Authority duty to adhere to the Conservation of Species & Habitats Regulations 2010 ('the Regulations'). As context for the Habitat Regulations Assessment the Council's Ecology Officer has noted that Shropshire is a rural county with diverse geological and ecological interest, including the meres and mosses natural area. The county is surrounded by a high number of European Designated sites which could potentially be affected by plans and projects undertaken in Shropshire. Many of the European Designated sites in Shropshire are wetland, fen or bog habitats which are especially sensitive to air pollution and water pollution which damages the plant communities which are key reasons for their designation. In Shropshire, Staffordshire and Cheshire there are 2 phases of Ramsar designation spread across the region:
- i. Midland Meres & Mosses Ramsar phase 1 – made up of 17 discrete meres and mosses sites
  - ii. Midland Meres & Mosses Ramsar phase 2 – made up of 21 discrete meres and mosses sites

- 11.131 Shropshire Council as the relevant decision making authority must consider the proposals under the Habitat Regulation Assessment process in accordance with the Conservation of Species & Habitats Regulations 2010 ('the Regulations'). Two 'tests' must be applied under the Regulations, the 'significance test' and the 'integrity test'. Both must be considered before permission may legally be granted by a competent authority (such as a Local Planning Authority). The first test ('significance') is addressed by Regulation 61, part 1:

- 61(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for a plan or project which –
- (a) is likely to have a significant effect on a European site (either alone or in combination with other plans or projects), and
  - (b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.

If it can be ascertained that the proposal will not have a significant effect on the internationally important interest features of the site, alone or in combination with other plans or projects, then a planning decision can be made. If it cannot, then a detailed Appropriate Assessment of the effects must be carried out.

The second test (the integrity test) is addressed by Regulation 61, part 5:

61(5) In light of the conclusions of the assessment, and subject to regulation 62 (consideration of overriding public interest), the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

In this context 'likely' means "probably", or "it well might happen", not merely that it is a fanciful possibility. 'Significant' means not trivial or inconsequential but an effect that is noteworthy (Natural England guidance on The Habitat Regulation Assessment of Local Development Documents (Revised Draft 2009)).

11.132 The 'significance test' is intended to ensure that no project that might have an effect on the integrity of a European Site proceeds without being subject to an appropriate assessment as to the site's integrity. Before making a planning decision the outcome of the significance test and the integrity test if applicable must be determined beyond reasonable scientific doubt. This is taking into account the consultation responses of Natural England, the Environment Agency and other consultees.

11.133 To assist Shropshire Council in reaching a conclusion under the Habitats Regulations the applicant has undertaken an appraisal of the potential effect of emissions from the EWF on protected sites with the zone of influence of the proposed EWF. The applicant states that the Environmental Permit process regulated by the Environment Agency would require the strict control and monitoring of the emissions from the EWF. As such the Ecological Impact Assessment considers that risk of significant negative impacts on surrounding sites, vegetation and protected species via increased pollutant levels is extremely low. The applicant has commissioned a Habitats Regulations Assessment which considers the effect of potential pollutants from the proposed EWF on SSSI's / Ramsar sites in the area surrounding the application site. This concludes that the critical loads and levels at which harmful effects might be anticipated would not be exceeded at the sites in question. The only exception was Hencott Pool 1.7km west-south-west where critical levels for two pollutants were slightly exceeded for sensitive bog habitats. The applicant has therefore commissioned further work on this issue to inform the Appropriate Assessment process.

11.134 The applicant's Appropriate Assessment report advises that the SSSI designation records Hencott Pool as containing Carr habitat including cowbane and elongated sedge. However, a 2003 ecological survey classified the site as highly enriched woodland. Cowbane was not recorded and elongated sedge was much less abundant than in 1979. The applicant cites research which advises that elongated sedge populations are most successful in late-successional sites as they start to dry out. The research states that 'Hencott Pool in Shropshire was considered one of the best such sites in the 1980s, with hundreds of plants, but it had almost gone from there twenty years later as the pool dried out and the canopy closed. Hencott Pool was dominated by woodland with a dense canopy at the time of the Scott Wilson survey in 2008. The applicant states that it is unlikely therefore that elongated sedge is still present at Hencott Pool. Therefore the applicant concludes that development of the proposed EWF will have no detrimental impact on the reasons for the sites SSSI designation. Even if cowbane and elongated sedge were still present on the site, the applicant states that critical levels and critical loads for certain pollutants were only exceeded for sensitive bog habitats which are no longer present, and not for other

habitats. Natural England has confirmed that the site is currently in an unfavourable condition and declining. In view of this, the applicant's ecologists conclude that the development and operation of the proposed EWF would not adversely affect the integrity of Hencott Pool.

11.135 Shropshire Council's Ecologist has undertaken a Habitat Regulations Assessment of the proposals under the Conservation of Species & Habitats Regulations 2010. This is included as Appendix 1 of this report. In considering the significance of potential effects account has been taken of the advice of the Environment Agency as the appropriate competent technical body under the Habitat Regulations. The Environment Agency uses its Technical Advisory Note H1 and its Habitat Directive Handbook which both establish that in the opinion of Environment Agency emissions are unlikely to lead to a significant environmental impact where:-

- i. the contribution to long term (annual average) ground concentrations is less than 1% of the relevant air quality standard; and
- ii. the contribution to short term (usually one hour average) ground level concentrations is less than 10% of the relevant air quality standard

Whilst exceedence of these thresholds does not necessarily mean a release will have a significant impact it does mean that a more detailed assessment is required before reaching a final conclusion.

11.136 Ecology. Habitats Regulations - The Significance Test The conclusions of Shropshire Council's Habitat Regulations Assessment are:

- i. Emissions of NO<sub>x</sub>, SO<sub>2</sub>, NH<sub>3</sub>, HF are not likely to have a significant effect on the interest features of the Ramsar sites alone or in combination as process contributions are less than 1% of the relevant environmental benchmark.
- ii. Deposition of nutrient nitrogen is not likely to have a significant effect on the interest features of the Ramsar sites alone or in combination as process contributions are less than 1% of the minimum Critical Load for nutrient nitrogen deposition.
- iii. Deposition of acid is not likely to have a significant effect at Fenemere, Berringtonne Pool, and Bomere, Shomere & Bettonne Pools both alone and in combination, as process contributions are less than 1% of the Critical Load. However, deposition of acid at Hencott Pool is 1.6% of the environmental benchmark, therefore a more detailed assessment of the predicted environmental concentration is required.

Further Consideration of Acid Deposition at Hencott Pool

- iv. This issue is considered in the Environment Agency's Pollution Prevention and Control Permit which concludes that there will be no significant effects for the following reasons:

'The precautionary approach to the modelling assumed the emissions of all acidic gasses would occur at the WID (Waste Incineration Directive) limits though in fact the emission levels will be considerably less than this, and are likely to be below 1% total acid Critical Load at Hencott Pool SSSI. The

Critical Load Function demonstrates that, when considering Sulphur and Nitrogen deposition the input from the proposed installation will be insignificant. Thus whether the facility is there or not makes negligible difference to the already relatively high levels of acid deposition at the site. Based on comparisons from other cases of modelling compared to measured values once the incinerator is operational the Environment Agency states that 'the process contribution dropped to below 0.9% of the total acid Critical Load.'

- 11.137 Ecology. Habitats Regulations - The Integrity Test The Environment Agency found that for Berrington Pool, Bomere, Shomere & Bettonne Pools and Fenemere all emissions from the proposed Energy from Waste Facility were below 1% of the relevant environmental benchmark and as such would have no effect on the integrity of the site. For Acid Deposition at Hencott Pool the Environment Agency concludes that 'thus whether the facility is there or not makes negligible difference to the already relatively high levels of acid deposition at the site.'
- 11.138 Ecology. Habitats Regulations - Conclusion The Environment Agency has issued a permit for operation of the proposed EWF. In reaching the decision to issue the permit the Agency has concluded that 'there will be no likely significant effect on a European Site'. Natural England has been consulted by Environment Agency and has agreed with this conclusion. Regulation 65(2) of the Conservation of Habitats and Species Regulations 2010 states that 'nothing in regulation 61(1) or 63(2) requires a competent authority to assess any implications of a plan or project which would be more appropriately assessed under that provision by another competent authority'. In the case of the current application Shropshire Council is regarding the Environment Agency as the competent authority who would most appropriately assess the air pollution aspects of the planning application. As such, under Regulation 65(2) of the Conservation of Habitats and Species Regulations (2010), Shropshire Council is relying on the evidence provided by the Environment Agency in the document Determination of an Application for an Environmental Permit under the Environmental Permitting (England & Wales) Regulations 2007 (Reference number EA/ERP/XP3239GF/A001). The Environment Agency has acknowledged that it is the competent authority for dealing with air pollution issues and has confirmed that it would be appropriate for Shropshire Council to take account of the Agency's conclusions in considering the current planning application (under Section 65(3) of the Regulations). In light of the evidence provided by the Environment Agency as the most competent Authority to assess the air pollution aspects of the planning application it is accepted that there is no likely significant effect of the proposed Energy from Waste facility (application SC/MS2009/0125/SY) on any European Designated site.
- 11.139 Ecology – protected species Some species have a high level of protection under European law. The Conservation of Habitats and Species Regulations 2010, implement the European 'Habitats Directive' (EC Directive 92/43/EEC). Regulation 41/42 of these Regulations makes it an offence to deliberately capture, injure, kill or disturb an EPS, or to damage or destroy the breeding site or resting place of such an animal. There are three tests which the Local Planning Authority must apply under the Habitats Directive before making a planning decision on a project that is likely to breach the protection of European Protected Species, namely:

- A. That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
- B. That there is no satisfactory alternative,
- C. That the proposed development must meet a purpose of preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.

If the tests cannot be met then planning permission must be refused. In the case of the current proposals the European Protected Species which need to be considered under the above regulations are Bats and Great Crested Newts.

- 11.140 Ecology, protected species - bats There are no buildings or mature trees on site which could provide roosting opportunities for bats. There are some mature trees on the northern side of the brook which could provide roosting sites but no bats were recorded emerging during the activity survey in June 2008. Three bat species were recorded on or adjacent to the development site, although the levels of activity were low. Records concentrated along the Brook and bats were foraging and feeding up along both the brook and off site hedgerow which runs perpendicular to it. Foraging activity within the site itself was limited. As there are no potential roosting sites and only low levels of activity were recorded, no mitigation will be required during the construction phase in relation to bats. During the operational phase, the majority of lighting will be turned off outside normal hours of operation, although the bunker hall will be lit continuously. However, this is covered with solid cladding which will minimise light emissions from this area. It is concluded that if suitable control measures are implemented in relation to the external night-time lighting, then there will be no significant impact on bats from operation of the facility.
- 11.141 Ecology, protected species - Great Crested Newts - No GCNs were recorded within the site boundary, or in the small pond in the adjacent IWMF site. However, a small population of GCNs were recorded in the pond c. 160m to the north of the site. It is reasonable to assume that a medium population size class is present. The proposed development site represents 'intermediate' terrestrial habitat for GCNs and is connected to the breeding pond by semi-improved neutral grassland and a defunct hedgerow. Planning permission was granted for a Food Enterprise Centre on the plot immediately surrounding the pond, so the terrestrial habitat within the proposed development site will become more important and as such the site is valued as being of local importance for GCNs. Great Crested Newts will need to be excluded from the development site and any other working or storage areas to ensure none are harmed during site clearance and construction activities. This must be carried out under a European Protected Species Mitigation Licence from Natural England and implemented prior to commencement of the development.
- 10.142 The full details of Shropshire Council's European protected species three tests analysis are included as Appendix 2 to this report. With respect to bats it is concluded that there would be no significant effects on this protected species subject to imposition of an appropriately worded condition to control external lighting. With respect to Great Crested Newts it is concluded that a number of mitigation measures are also available to ensure that the development should not be detrimental to the maintenance of the populations at a favourable conservation status in their natural range. The breeding pond, which appears to be deteriorating as habitat for GCNs,

will be unaffected by the development and so the addition of a purpose built new pond on the development site, together with the proposed improvements to terrestrial habitat, have the potential to improve the conservation status of the local GCN population.

- 11.143 Ecology, other species - Badgers Badgers are protected under the Protection of Badgers Act 1992. An active badger sett was recorded during the survey in April 2008. The follow up survey in June 2008 did not reveal fresh signs of badger activity and the sett no-longer appeared occupied. Further surveys in October 2009 and March 2010 revealed renewed signs of occupation. Although the sett itself will not be directly affected by the development, clearance of the site will result in the loss of potential foraging habitat and construction activities are likely to cause some disturbance to any badgers using the sett. The applicant's ecologist states that the only works in the vicinity of the site are landscaping and that a 10m buffer will apply from the bank of the brook as a wildlife corridor. A 20m exclusion zone around the sett has been proposed, with vegetation retained in the exclusion zone and buffer strip along the brook throughout the development period. This will avoid disturbance and retain suitable foraging habitat and a movement corridor for the badgers. The current status of the badger sett will be checked prior to the start of construction, to note changes in use of the sett and determine if a licence will be required from Natural England for works to proceed in the vicinity of the sett. Badgers are likely to become habituated in time to a constant noise level, but screening planting will help to attenuate the noise levels emitted during the operation of the EWF. Night time traffic could result in Badger mortalities, although speed restrictions at night could help to alleviate this.
- 11.144 Ecology, other species A number of bird nests were recorded in the scrub and trees along the banks of the Battlefield Brook, and there is suitable habitat within the site for ground nesting birds. Clearance of vegetation will therefore need to be carried out under a strict method statement, to ensure there is no significant impact on nesting birds. Common bird species are known to become habituated to constant noise levels, and the erection of screening planting will help to attenuate the noise levels emitted during operation of the EWF. Control and monitoring of emissions will minimise the potential risk to breeding birds from increased levels of pollutants which could affect breeding success. No current evidence of Water Vole was found along Battlefield Brook during the survey in June 2008. The Brook is sub-optimal for water vole as the water is very shallow. The banks do have a profile suitable for burrow excavation and there is substantial vegetative cover for water vole to exploit as a feeding resource. Disused burrows indicate that they may have been present in the past. Maintaining a 10m buffer strip of undisturbed vegetation along the brook would ensure any colonising water voles would have sufficient habitat. Although no historical reptile records have been provided for the site, and no reptiles have been recorded, the site does contain suitable habitat for this under-recorded group. Although it is considered a low risk that any reptiles are present within the site, reasonable precaution measures will be implemented to ensure there will be no impact on reptiles from construction activities, in the unlikely event that any are present within the site. The applicant has supplied a bird and reptile mitigation statement.
- 11.145 Ecology - Habitats An Extended Phase 1 Habitat Survey was carried out in March 2007. Clearance of the site in preparation for construction would result in the permanent loss of c. 1.7 ha of semi-natural vegetation, including semi-improved neutral grassland and tall ruderal vegetation. Although these habitats are of low

intrinsic value, as they are relatively species-poor and comprise only common species, they do provide foraging and refuge opportunities for a variety of wildlife. The more valuable areas of trees and scrub along Battlefield Brook will be retained, as will a buffer zone of grassland along Battlefield Brook, comprising 10m from the top of bank. There will also be landscape planting, of native species (including berry producing species), around the northern side of the development to provide visual screening. Once established this will provide structural diversity and food and refuge opportunities for a variety of wildlife, including nesting opportunities for birds. The applicants therefore consider that there will be no long term significant impact from the loss of existing vegetation. The brook could be affected by spillages or excessive dust. A pollution prevention programme will be implemented to ensure no run-off can enter the water course during construction activities, ensuring there will be no significant impact on the water course.

- 11.146 Ecology - Brook management The applicant has indicated a willingness to liaise with the owners of the northern half of the stream to the north of the site to promote a more coordinated approach towards management of the water corridor. The enhancement of the corridor is acknowledged by the applicant as an important part of the facility design. Currently the landowner is understood to be Advantage West Midlands, however once the land is developed this is likely to change to new landowner(s). Efforts will be made to commence discussions with appropriate interested parties to see how coordination of management of the water corridor might be developed.
- 11.147 Ecology – Off site planting The applicant is proposing to undertake off site planting on Shropshire Council owned land adjacent to the Battlefield Link Road as part of a conservation management scheme relating to the historic battlefield (see section 11.90). It is considered that this would offer potential ecological benefits in addition to reducing the carbon footprint of the proposals.
- 11.148 Ecology – Conclusion It is concluded that the proposals are capable of being accepted in relation to relevant development plan policies relating to ecological issues and associated legislation concerning habitats and protected species. In particular, it is concluded that emissions from the proposed EWF would not have a significant effect on the Hencott Pool Ramsar Site or other protected sites surrounding the application site. This is having regard to the requirements of the Habitats Regulations and the advice of the Environment Agency and Natural England. It is also concluded that suitable mitigation measures are available to ensure that the proposals would not have a significant adverse effect on any protected species, habitats or other ecological interests. The potential ecological benefits of the proposals in terms of brook management / habitat enhancement, supplementary planting and carbon offsetting are acknowledged.

## HYDROLOGY AND DRAINAGE

- 11.149 The site is located adjacent to Battlefield Brook and within the Total Catchment Zone of a major aquifer with public water abstractions 2km to the south and 5km to the southeast. There is also a small pond onsite. The groundwater level in the vicinity of the waste bunker is between 14.2 and 15.2 m below ground level. The Environment Agency classify the area close to the brook as lying within the 1 in 100 year floodplain i.e. the chance of flooding each year is 1%, or greater. The 1 in 100 year flood level (including an allowance for climate change) has been calculated as 67.63m AOD. In

addition, the Environment Agency requires a 600 mm freeboard to allow for residual risk (i.e. 68.23 m AOD). The proposed finished floor level of the buildings (72.25m AOD) is substantially above the 100 year flood level and also the EA's original proposed level of 70.45 m AOD (69.7 m AOD plus 150 mm allowance for climate change plus 600 mm freeboard). The proposed buildings will therefore not be at risk of flooding during a 100 year event.

- 11.150 The hydrology and drainage report advises that environmental management of the site during construction would ensure that the risk of any potential impacts on water resources are minimised. The report concludes that the construction and operation of the site would have a negligible impact upon the water quality of the Battlefield Brook, the onsite pond and local surface water flows. Proposed mitigation measures would also ensure that there is a negligible effect on groundwater quality, groundwater flow and abstractions. The site would be constructed above the anticipated water table and would therefore have a negligible impact on groundwater flow and levels and any associated ecological receptors dependant on groundwater.
- 11.151 The proposed development involves the concreting a further area adjacent to the existing waste management site. This would render the site largely impermeable and will locally reduce the recharge of groundwater. Additional storage capacity would however be provided in the form of an underground tank and oversized pipes to prevent any increase in run-off. A number of safeguarding provisions are included in the application to reduce the risk of polluting the aquifer. Contaminated drainage from the operational hardstanding and vehicle wash would be directed to the foul sewer via an oil interceptor, and uncontaminated water (i.e. from the staff car park) would be discharged to the storm water sewer. Clean roof run-off water from the existing waste transfer building is recycled in the vehicle wash and sprinkler systems, reducing the amount that would need to be supplied to the site. Soakaways would be constructed to Environment Agency standards to take surplus roof water run-off. Appropriate safeguards would be put in place during the construction phase to allow settlement of silt prior to discharge of any site water. The Environmental Permit would also incorporate controls to minimise any potential impacts on water resources during operation. It is concluded that the site is generally compliant with the principles of sustainable urban drainage.
- 11.152 The Environment Agency has advised that further information is required in relation to the landscaping of the river corridor and the treatment of the water course and the detention basin. This should include details of the future management of this area to maintain its flood risk reduction and biodiversity benefits. Maintenance of vegetation to ensue that the bank does not become overgrown would be sufficient in relation to flood risk reduction. It will also be necessary to ensure that the watercourse channel itself is checked and any debris within the channel removed to prevent a blockage at the culvert downstream. It is concluded that, subject to the imposition of appropriate conditions to cover the above matters, the development should have no unacceptable adverse effects on surface drainage and water quality and no appreciable affect on the rate of aquifer recharge (SAB Local Plan Policies INF4, INF6, INF7).

## POLLUTION

- 11.153 Ground Contamination Site investigations have shown no evidence of contamination in the ground at the site. The potential of historic contamination of the site to cause pollution of air, water and land is therefore not considered to be significant.

11.154 Management of waste generated by the site Waste materials will need to be managed during both construction and operation of the facility. A Site Waste Management Plan (SWMP) will be prepared for construction. A Management Plan required under the site's Environmental Permit will details of measures for managing waste during site operations. The applicant states that effective implementation of the above plans will ensure that there are no residual effects associated with waste management activities at the site.

### COMMUNITY AND SOCIAL

11.155 Community and Social Assessment As part of the Environmental Statement an assessment of community and social effects has been undertaken in order to review potential impacts on residential amenity, local economy and employment, lifestyle and recreation, property values and inward investment and accidents and hazards. In relation to residential amenity the assessment concludes that there is little opportunity for impacts to arise, other than those already addressed in the ES. The Environmental Permit would contain conditions relating to the management of mud, litter and pests. The proposed development is likely to generate significant temporary economic and employment benefits in the locality during the construction phase. The scale of these benefits will reduce as the development moves into the operational phase, but the permanent jobs to be created can be expected to contribute positively to average wage levels in the area and the diversity of the local employment base. The Environmental Statement confirms that the proposed facility would employ approximately 21 full time staff. In addition, 30 contractors would be employed for up to 5 weeks per year for planned shutdown activities.

11.156 The effect of the proposals on property values is not regarded as a valid planning consideration. However, an assessment of property transactions in Hampshire where similar EWF developments had been proposed and developed found that the presence of the EWFs had not resulted in any noticeable or lasting adverse affect on local property markets. All locations had seen continued investment/development in both the residential and commercial sectors in the periods following the grant of planning permission.

11.157 The assessment acknowledges that in certain circumstances, the "perception" of environmental risk by people can be a material consideration. However, this is not readily quantifiable and the extent of any "perceived risk" would not become clear until people have had opportunity to study the submitted scheme. The application has attracted high levels of objection and there have been coordinated responses from local bodies and also bodies with links to national organizations such as Friends of the Earth. Many representations express concerns about pollution and health and question the need for the facility. Other concerns relate to loss of property value, environmental impacts (visual, traffic etc) and general blight. One representation alleged that the proposals would have a negative effect on the image of Shrewsbury as a tourist destination and emphasised the significant contribution which tourism makes to the local economy.

11.158 The ES and further information submitted by the applicant supports the conclusion that no individual issues raised by the proposals would give rise to unacceptably adverse effects on the environment or people after mitigation had been applied. The facility would comply with all relevant legislation concerning emissions to air and

would be strictly controlled and monitored through the Environment Agency's Environmental Permitting regime. The Health Protection Agency has stated that 'modern, well managed incinerators make only a small contribution to local concentrations of air pollutants. It is possible that such small additions could have an impact on health but such effects, if they exist, are likely to be very small and not detectable'. The applicant has confirmed that high levels of objection were received in relation to other EWF's they have developed. However, subsequent operation has generally not resulted in any issues which would validate the concerns expressed at the application stage. High levels of objection were also received in response to the application for the existing phase 1 waste management site at Battlefield, but subsequent operation over the past 5 years has not validated these concerns.

- 11.159 It is recognised that the detailed circumstances of the current application differ from the above developments. However, the proposed EWF would be located on an established business estate next to an existing waste management building and would be surrounded by other large industrial buildings and planned buildings. It would also be relatively remote from most residential areas and properties. In addition, the EFW building would be designed to a high standard with mitigation landscaping and incorporated design features to reduce its visibility from distance. Issues linked to the visitors' perception of the battlefield site are considered in a preceding section. However, it is not considered that refusal would be justified for any of the potential impacts referred to above, or on the basis of a perception of adverse impacts. This is having regard to the above considerations and the availability of appropriate mitigation measures.
- 11.160 Neighbouring Land Uses In relation to compatibility with neighbouring uses, the proposals would have similar implications to an industrial use in terms of buildings and traffic, but would be subject to a significantly greater level of operational control, in particular through the Environmental Permitting Regime. Adjacent land to the south has been developed for B2 uses which are considered to be compatible with the current proposals. An outline planning permission has been granted for a Food Enterprise Centre on land to the north and west of the site and part of the site is now being developed. However, it is not considered that there would be environmental conflicts given the tight level of controls which would be imposed, and the fact that, as with the current waste management site, all waste handling would take place under cover. It is concluded that the proposals can be accommodated in relation to the circumstances specified in SAB Local Plan Policy EM2(iii).

### CUMULATIVE AND COMBINED IMPACTS

- 11.161 The Environmental Impact Assessment Regulations require potential cumulative and combined to be assessed. The Environmental Statement considers the potential for cumulative and combined effects in relevant sections including traffic, noise, landscape and visual impact, cultural heritage and hydrology. Cumulative impacts can arise from an interaction between different impacts. For instance, if dust associated with the construction of one proposed development is co-incident with dust from construction of another there would be the potential for a cumulative dust impact. Combined effects are where a particular type of effect results in an effect to a different category of receptor. Examples of combined effects considered by the ES include the potential for changes in vehicle movements to have a corresponding impact on air quality or air emissions and for changes in emissions to have a corresponding potential impact on plume visibility, ecology or health. The ES

considers the residual effects of potential cumulative and combined impacts after mitigation has been applied. In the case of interactions between noise and air quality, potential impacts could be experienced simultaneously or intermittently. There may be no direct connection between the effects, other than that both could cause annoyance, whether experienced separately or together. Mitigation of combined impacts is best achieved through management of construction or operations to prevent the individual impacts themselves and prevent such interactions occurring.

- 11.162 The applicant has proposed mitigation measures for individual impacts both during construction and subsequent operation of the proposed facility. These measures would be supported by planning conditions and detailed controls available under the Environmental Permitting Regime. It is considered that the application of these controls to address individual impacts would in principle also prevent any unacceptably adverse impacts from arising as a consequence of cumulative or combined effects. The detailed management systems proposed for the construction and subsequent operation of the proposed site would also provide the opportunity to pre-empt and reduce the potential for such impacts to occur.

### OTHER ISSUES

- 11.163 Fire/Safety The applicant has confirmed that appropriate fire prevention safeguards would be built into the facility, including installation of a spray mist / sprinkler system in the EWF building.
- 11.164 Surplus excavated material Planning permission to store 6000m<sup>3</sup> of surplus subsoils towards the centre of the proposed application site was granted in April 2004 (application ref SC/MS2004/0380/SY). The soils were derived from development of the current operational waste management site. The applicant states that the soil within the stockpile is intended for use on site as part of the EWF construction programme. It is stated that other excavated material from construction of the proposed EWF is also designated for use elsewhere on the site where levels require building up adjacent to the flood plain. The applicant do not anticipate that there would be a net removal of excavated material off site and have advised that this was one of the factors considered during the design phase in order to minimise traffic impacts during construction.
- 11.165 Other EWF proposals Planning permission by SITA UK Ltd to establish an EWF at Woodhouse Farm east of Telford was refused by Telford & Wrekin Council in December 2009. If an EFW were subsequently to be developed in Telford the applicant does not consider that it would attract material from the Battlefield catchment area. VESS confirms that the Battlefield EWF has been sized to accept forecasted residual municipal waste produced within the Shropshire Council area. Limited amounts of other similar local commercial wastes would also be accepted where necessary. Shropshire's residual municipal waste is managed by VESS as part of the integrated waste management service. Significant tonnages of local commercial waste are also collected by VESS commercial division. VESS considers the residual waste tonnages it controls are greater than the capacity of the Battlefield EWF. Some objectors have suggested that consideration should have been given to formulating a joint strategy to manage municipal waste in Shropshire and Telford & Wrekin. However, it is necessary to assess the current proposals for an EWF to serve the administrative area of Shropshire Council on their own merits.

## PREMATURITY

- 11.166 The current application has been submitted in advance of adoption of new Local Development Framework documents for Shropshire incorporating updated waste policies. Such policies will reflect changes to government guidance which have occurred since the current Waste Local Plan was adopted in October 2004. This includes replacement (in PPS10) of the requirement to undertake Best Practicable Environmental Option analysis at the application stage with the requirement to undertake Sustainability Appraisal at the plan making stage. PPS10 provides advice to Local Planning Authorities on the context in which planning decisions on waste management development proposals should be taken where an 'old style' Waste Local Plan has not yet been replaced. The guidance advises (in 8.24) that in such circumstances Local Planning Authorities should "have regard to the policies in this PPS as material considerations which may supersede the policies in their development plan. Any refusal of planning permission on grounds of prematurity will not be justified unless it accords with the policy in The Planning System: General Principles."
- 11.167 It is further stated (in 8.25) that "the key policy requirement on planning authorities is to ensure proposals are consistent with the policies in PPS10 and implement the Key Planning Objectives (set out in PPS10) through their planning strategies. PPS10 does not require BPEO and specifically advises that "planning authorities should ..... avoid placing requirements on companies that are inconsistent". There is, however, "a policy expectation for consistency with PPS10 (8.27). In the absence of an up to date development plan, the planning authority will need to ensure they have sufficient information from the applicant to 'test' consistency with PPS10, in which the Key Planning Objectives play a critical role (8.28). Where the proposal is one requiring EIA, the needed information may be forthcoming through the Environmental Statement (ES). "Where a development plan does not adequately reflect national planning policy on waste as set out in PPS10, the policy in PPS10 will be a material consideration" (8.10).
- 11.168 It is considered that the current Waste Local Plan remains substantially in accordance with national planning policy, relevant guidance and other current development plan documents. It is also considered that the level and content of detail included in the Environmental Statement and the supplementary information which has subsequently been provided by the applicant is sufficient to allow an informed decision on the application and the extent to which it complies with Key Planning Objectives as set out in PPS10. It is concluded that the application is not premature in the context of relevant current and emerging waste policies.

## **12.0 CONCLUSION**

- 12.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that determination must be made in accordance with the Development Plan unless material considerations indicate otherwise. The extent to which the application complies with relevant development plan policies has been considered in succeeding sections. The following conclusions can be drawn:
- 12.2 Whilst the proposals are not fully consistent with the Site Profile of the Shropshire Waste Local Plan it is considered that they represent a potentially acceptable waste management solution having regard to the site's role as a strategic central hub for

waste management in Shropshire. This is provided that the proposals can comply with the following tests:

- (1) there are sufficient material considerations to justify a departure from the specific processes listed in the relevant Site Profile; and
- (2) the proposals can be accepted in relation to other relevant policies, guidance and local considerations, including environmental issues and the key waste management principles set out in PPS10; and
- (3) the proposals are capable of being accepted in relation to relevant wildlife legislation.

12.3 With respect to point 1 it is considered that the EWF proposals would be capable of forming a key part of a waste management network which would allow increased diversion of waste from landfill in order to achieve and exceed current recycling targets. The proposed EWF facility would only deal with residual municipal waste remaining after recycling reductions have been applied. Even if future municipal waste recycling rates significantly exceed current targets, a substantial residue of non-recyclable material is likely to remain as a potential feedstock for the proposed EWF, given anticipated household growth. Currently, residual municipal waste is bulked up at Waste Transfer Stations including Battlefield and exported to landfill sites outside of the County. It is acknowledged however that continued landfilling is not a sustainable future waste management option, either environmentally or financially. It is recognised that the proposals would be capable of providing the required new capacity to manage residual municipal waste which the Waste Local Plan advises is urgently needed. The ability to manage residual municipal waste at the geographic centre of Shropshire's waste management network would also have the environmental and economic benefit of reducing the number of lorry journeys needed to transport waste to landfill sites outside the County.

12.4 It is considered that the proposal is consistent with the key tests set out in PPS 10 and the principles of managing waste higher up the waste hierarchy, regional self-sufficiency and the proximity principle. In addition, the EFW process would allow renewable energy to be recovered in the form of electricity from non-recyclable waste residues. The potential would also exist to utilise heat from the process in a district heating (DH) scheme, given the presence of other potential heat users on a developing business park. Furthermore, the applicant has provided details in support of the ability to recycle Incinerator Bottom Ash and has indicated a willingness to enter into a legal obligation to facilitate both IBA recycling and establishment of DH, subject to favourable market conditions.

12.5 The applicant has justified the choice of EWF as the preferred waste management technology following a detailed appraisal of other potential waste management solutions. The applicant considers that EWF is the only treatment technology which would provide a comprehensive, technologically proven and cost-effective solution for management of Shropshire's residual waste. It is considered that other technologies such as Mechanical Biological Treatment (MBT) would potentially risk driving waste policy in the wrong direction, by reducing the current emphasis on private householders to assume responsibility for the waste they produce. The applicant has also raised technical concerns with such alternatives, including issues with the quality / acceptability of recyclates generated by MBT and the fact that residual wastes from the MBT process could still require disposal to landfill or EFW.

- 12.6 The applicant's general conclusions with respect to alternative technologies and the potential benefits of EWF in the circumstances of Shropshire are acknowledged. It is also accepted that the current site offers distinct advantages in terms of location, size and access. The applicant has undertaken a detailed appraisal which has not identified any other sites which are as suitable for the proposed waste management use. This conclusion is validated by earlier work on the Shropshire Municipal Waste Management Strategy, the Shropshire Waste Local Plan and the Environmental Statement for the current waste management site at Battlefield. It is considered that the detailed circumstances of the proposals lend support to the applicant's choice of EWF as the preferred waste management process. It is also considered that sufficient material considerations apply in principle to justify a departure from the specific processes listed in the relevant Site Profile linked to Waste Local Plan Policy P6.
- 12.7 With respect to the second test listed above (compliance with other development plan policies), the Environmental Statement deals comprehensively with other relevant planning issues. It is considered that the ES complies fully with the relevant regulations. Further detailed information has also been submitted to provide additional clarification on issues including need, throughput, alternatives, site layout, ash recycling, air quality and health, energy efficiency, carbon footprint, building design, traffic and transport, visual amenity, wind effects, ecology, hydrology and drainage. It is not considered that any of the potential impacts of the scheme would be sufficiently adverse as to justify refusal when available mitigation measures and relevant policies and guidance are taken into account.
- 12.8 With respect to air quality the proposals would be strictly monitored and controlled under the Permitting process administered by the Environment Agency. A substantial amount of data from operational EWF's is available to support the conclusion that modern EWF plants are capable of complying fully with current air quality standards. With respect to health issues, a recent review by the Health Protection Agency concludes that 'modern, well managed incinerators make only a small contribution to local concentrations of air pollutants. It is possible that such small additions could have an impact on health but such effects, if they exist, are likely to be very small and not detectable'. Whilst the concerns of local objectors are acknowledged, it is not considered that an objection on the grounds of air quality or health could be substantiated.
- 12.9 With respect to landscape and visual effects, the proposed EWF building would be taller than other buildings on the industrial estate, but would be smaller than equivalent EWF's built elsewhere and designed to a high standard with features to reduce the visual impact of the building as seen from surrounding areas. It would also be located adjacent to the existing waste management building and in close proximity to existing industrial development and other land allocated for employment use. Planting proposals both within and along the boundaries of the site would gradually integrate the development with the surroundings. The chimney would be slender in design, coloured light grey and would be similar in height to electricity pylons located to the north of the site. Whilst a short steam plume may be visible at certain times it is not considered that this would add materially to the visual impact of the proposals as seen from external viewpoints. It is not considered on balance that an objection could be substantiated on grounds of visual or landscape impact.
- 12.10 With respect to cultural heritage, the applicant has since prepared revised

photomontages which provide further clarification on the visual effect of the proposed development as viewed from the historic battlefield site. It is considered that this demonstrates the extent to which existing and planned vegetation will be capable of providing screening the proposed site as viewed from the vicinity of the historic battlefield. Following discussions with English Heritage the applicant has also put forward a Conservation Management Plan to mitigate any residual effects on the battlefield. This includes proposals for off site planting, further management of the footpath network through the battlefield site and interpretation. The Conservation Management Plan will form part of a legal agreement with the company. English Heritage has confirmed the withdrawal of its initial objection. It is concluded that the proposals can be accepted in relation to relevant development plan policies and guidance relating to cultural heritage.

- 12.11 With respect to traffic, the industrial estate roads surrounding the site have been designed specifically to accommodate the types of articulated vehicle which would visit the proposed facility and are operating at well below capacity. The existing waste management facility at Battlefield already receives similar numbers of heavy vehicles to those proposed. There would be a limited increase, but this would be minimised if Veolia's preferred policy of backloading is pursued. The applicant has agreed to accept a routing restriction to ensure that lorries visiting the proposed site approach from and leave in the direction of the Battlefield Link Road (except where local access is required), thereby avoiding the built-up areas of North Shrewsbury. The applicant has also agreed to implement a transport management plan in order to pursue more sustainable transportation options in connection with the proposed development. In addition, the proposals would facilitate improved internal circulation arrangements with increased internal stacking capacity and more effective separation of HGV and public traffic. It is considered that the proposals can be accepted in relation to highway and traffic considerations.
- 12.12 With respect to monitoring and control measures, the development would be regulated and monitored by a number of statutory bodies to ensure that the mitigation measures proposed are effective. This regulation would be to a greater extent than for other estate occupants and would include the requirement for a Pollution Prevention and Control Permit issued by the Environment Agency. Council officers also represent the Authority on a number of local liaison groups for mineral and waste sites, which also includes representatives from the local community. A similar arrangement could be put in place in respect of the current site, in order to provide added reassurance in relation to site operations.
- 12.13 With respect to ecology the Environmental Statement includes a report which is supported by appropriate surveys and recommendations in accordance with relevant wildlife legislation. The report identifies the potential for some ecological impacts as a result of the proposed development but concludes that suitable mitigation measures are available to prevent adverse effects. A nearby badger sett would be checked prior to construction and a licence would be obtained if necessary. Measures would be put in place to provide mitigation for the loss of foraging habitat for Great Crested Newts. Special safeguards would also be applied during site clearance work to minimise impact on birds and reptiles. The applicant's management plan for the river corridor would result in an ecological improvement relative to the current situation. It is not considered that there would be any unacceptable adverse effects on protected species or other ecological interests, having regard to the requirements of the Conservation of Habitats and Species Regulations 2010, subject to implementation of

the proposed mitigation measures. It is concluded that the proposals comply with relevant wildlife legislation with respect to the potential effects on protected species, habitats and wildlife generally.

12.14 With respect to protected ecological sites a Habitat Regulations Assessment considers the effect of potential pollutants from the EWF on SSSI's / Ramsar sites in the area surrounding the site. This concludes that the critical levels at which harmful effects might be anticipated would not be exceeded, except at Hencott Pool where levels were slightly exceeded for sensitive bog habitats. An Appropriate Assessment undertaken in accordance with relevant wildlife legislation advises that the sensitive habitats to which the above critical levels relate to are no longer present at Hencott Pool. The Environment Agency has confirmed in connection with the PPC permit application that anticipated air emissions from the proposals would be insignificant with respect to the conservation objectives of the various Ramsar sites (i.e. contributing less than 1% of existing threshold levels). Natural England has confirmed on this basis that it has no objections to the proposals. Under the Habitat Regulations Shropshire Council must also satisfy itself as the decision maker that emissions from the proposed EWF would not impact adversely on Hencott Pool. It is considered that the controls on emissions which would be imposed as part of the PPC permit are capable of providing an appropriate degree of reassurance in relation to this matter. This is taking account of the further clarification provided by the Environment Agency as the appropriate technical body for air emissions. It is concluded that the proposals can be accepted in relation to relevant policies, guidance and legislation covering European protected sites.

12.15 It is considered that the proposals would comply with Waste Local Plan Policy P17 (Energy Recovery Facilities) in that they would be capable of forming an integrated part of a sustainable waste management system for Shropshire which would facilitate the provision of waste management facilities further up the waste hierarchy. It is also considered that the proposals are in general accordance with other relevant policies in the Development Plan for the reasons stated above, including in relation to pollution / health, cultural heritage and ecology. With respect to the key principles set out in PPS10 it is considered that the proposals would amongst other matters:

- meet a clearly identified need, allowing Shropshire to take responsibility for management of its own residual municipal waste within an overall system which is designed to drive waste management up the waste hierarchy;
- help implement the national waste strategy and supporting targets;
- enable recovery of waste in one of the nearest appropriate installations without endangering human health or harming the environment;
- support sustainable waste management through the design and layout of the proposed EWF.

In conclusion, whilst the proposals do not fully accord with the specific waste management processes listed in the Waste Local Plan site profile, it is considered that they are in general accordance overall with the policies of the development plan and therefore comply with Section 38(6) of the Planning and Compulsory Purchase Act 2004. It is also considered that there is an appropriate justification for not complying with the waste management processes specified in the WLP site profile. This is having regard to the identification of the site in the Waste Local Plan as a strategic centre for management of Shropshire's municipal waste management infrastructure, the detailed design of the site, the consideration of alternatives as

discussed above and the more recent guidance set out in PPS10. On balance it is concluded that the site represents an acceptable use of the site which is capable of complying with relevant development plan policies and guidance. This is provided detailed planning conditions are imposed and the applicant enters into a legal agreement to cover issues including traffic management, ash recycling and district heating as set out in section 14 below.

### **13.1 HUMAN RIGHTS**

13.1 Article 8 give the right to respect for private and family life and First Protocol Article 1 allows for the peaceful enjoyment of possessions. These have to be balanced against the rights and freedoms of others and the orderly development of the County in the interests of the Community. First Protocol Article 1 requires that the desires of landowners must be balanced against the impact of development upon nationally important features and the impact on residents. This legislation has been taken into account in arriving at the above recommendation.

### **14 RECOMMENDATION**

14.1 That the Council is minded to PERMIT the proposed development subject to the signing of a Section 106 Legal Agreement (the terms of which are listed below) and subject to conditions (to include those listed below).

14.2 That the application and related documents be forwarded to the Government Office for the West Midlands in accordance with Paragraph 3(b) of the Town and Country Planning (Development Plans and Consultation) (Departures) Direction 1999 as the development does not fully accord with the provisions of the Waste Local Plan which forms part of the Development Plan.

#### **14.3 Legal Agreement to include the following:**

- Measures to facilitate the establishment of a District Heating system to facilitate use of heat generated by the scheme, subject to appropriate criteria being met;
- Carbon offset planting / environmental management measures with annual reporting on such measures;
- Measures to facilitate recycling of Incinerator Bottom Ash subject to appropriate criteria being met, with reporting on such measures;
- HGV routing agreement to prohibit the use of Featherbed Lane and Whitchurch Road for HGVs associated with the construction, operation and decommissioning of the development (with contingency provisions for exceptional circumstances);
- A review of off-site road signs directing HGV traffic to and from the site, triggered by any changes in the primary road network, with implementation of any necessary changes and other management arrangements;
- Implementation of a Company Travel Plan and an overall Transport Plan;
- To implement a Conservation Management Scheme for heritage interests

incorporating the following measures:

- Funding for a scheme of off-site planting on Shropshire Council owned land adjacent to the A5124 Battlefield Link-Road and other associated areas, with thickening of existing vegetation to the immediate south of the battlefield heritage site in order to provide improved screening and definition of the urban / rural edge;
  - Funding for an educational facility detailing the battlefield heritage site, with provision of appropriate teaching resources;
  - Funding to implement improved interpretation and access proposals for the Battlefield site, including enhancements to the existing car park, signage, footpaths, hedging and fencing;
  - An annuity payment for the duration of the waste management contract to ensure appropriate management of the registered battlefield site in accordance with agreed principles set out in the Conservation Management Plan.
- Submission of scheme making provision for placement of heritage themed public art within or locally to the site;
  - To establish a community liaison committee to meet at specified intervals to discuss site operations;
  - To publish and maintain a dedicated web page / link providing emissions data for the site.
  - Clause to the effect that where conflict arises between existing conditions to permission reference SC/MS2009/0125/SY and any conditions which may be attached to any permission granted under reference SC/MS2009/0125/SY, the latter shall bind operations on the whole site

#### 14.4 The conditions as follows:

##### COMMENCEMENT OF DEVELOPMENT

- 1a. The development to which this planning permission relates must be begun not later than the expiration of three years from the date of this permission.
- b. Not less than fourteen days prior notice shall be given of the intended date for the commencement of any development under the terms of this permission, including Site preparation and construction works for the development of the Energy from Waste Facility (EWF). Such date shall be referred to hereinafter as "the Commencement Date".
- c. Not less than seven days prior notice shall be given in writing of the intended date for the commencement of operations at the Energy from Waste Facility, hereby referred to as the "EWF Commissioning Date".

**Reason:** To comply with Section 91(1) of the Town and Country Planning Act 1990 (1a), to define and provide appropriate advance notice of the Commencement Date (1b) and to facilitate proper monitoring of Site

operations linked to the commencement of the use of the Energy from Waste Facility (1c).

## DEFINITION OF SITE AND DEVELOPMENT

2. This planning permission for an Integrated Waste Management Facility shall only relate to the area edged red on the 1:1,250 scale drawing accompanying the supporting statement and the Environmental Statement entitled Figure 3.3 (existing site with application boundary), hereinafter referred to as "the Site" and incorporating the following buildings as shown on Drawing 101 (Site Plan) accompanying the Environmental Statement:

- Air Cooled Condenser;
- Bottom Ash Hall;
- Existing waste transfer station;
- Existing Household Recycling Centre;
- Waste Bunker;
- Tipping Hall;
- Turbine Hall;
- Flue Gas Treatment Hall.

**Reason:** To define the area to which this planning permission relates.

3. Except as otherwise provided in the conditions attached to this permission the operations and uses hereby permitted shall be carried out strictly in accordance with the approved scheme comprising:-

- i) The permitted scheme as contained within the application form dated 20<sup>th</sup> January 2009 and the supporting documents comprising:
- ii) The Supporting Statement dated January 2009 and the accompanying appendices comprising:

- Appendix A - Policy Analysis
- Appendix B - Consultation Statement
- Appendix C - BREEAM Assessment
- Appendix D - Site Waste Management Plan
- Appendix E - Heat User Study
- Appendix F - Landscape and Visual Impacts
- Appendix G - Natural Heritage
- Appendix H - Archaeology and Cultural Heritage
- Appendix I - Hydrology and Drainage
- Appendix J - Community and Social

- iii) The Environmental Statement dated January 2009 comprising the Non Technical Summary and Volumes 1, 2, 3 and 4 incorporating the following appendices:

- Appendix A - Construction (Environmental Statement Volume 2)
- Appendix B - Alternatives (Environmental Statement Volume 2)
- Appendix C - Transportation (Environmental Statement Volume 2)
- Appendix D - Noise & Vibration (Environmental Statement Volume 2)

Appendix E - Air Quality (Environmental Statement Volume 2)  
Appendix F - Landscape and Visual Impacts (Environmental Statement Volume 3)  
Appendix G - Natural Heritage (Environmental Statement Volume 3)  
Appendix H - Cultural Heritage (Environmental Statement Volume 4)  
Appendix I - Hydrology (Environmental Statement Volume 4)  
Appendix J - Community and Social (Environmental Statement Volume 4)

- iv) The permitted drawings included in the Environmental Statement accompanying the planning application. For the avoidance of doubt these include:

Figure 3.1 - Site Location  
Figure 3.2 - Site Context  
Figure 3.3 - Existing Site  
Figure 3.4 - Aerial View of Existing Site  
Figure 3.5 - Aerial View of Developed Site and Surroundings  
Figure 4.1 - Indicative Landscape Masterplan  
Figure 4.2 - Cross Sections  
Figure 4.3 - Computer Generated 3-D Images of Development  
Figure 4.4 - Input-Output Flow Diagram  
Figure 4.5 - EWF Process Flow Schematic  
Figure 4.6 - Construction Layout  
Figure 14.1 - Land-use  
Drawing 101-0 - Site Plan  
Drawing 102-0 - Existing Site & HRC-WTS Facility  
Drawing 110-0 - Proposed Layout  
Drawing 112-0 - Circulation Plan  
Drawing 113-0 - General Internal Arrangement  
Drawing 114-0 - HRC Extension  
Drawing 115-0 - Office-Welfare Arrangement  
Drawing 120-0 - South Elevation & Section AA  
Drawing 121-0 - North Elevation & Section BB  
Drawing 122-0 - West Elevation & Section CC  
Drawing 123-0 - East Elevation & Section DD  
Drawing 130-0 - Gatehouse

- v) The further information submitted by Veolia Environmental Services Shropshire Limited (VESS) to Shropshire Council dated 6th November 2009 (comprising a response under Regulation 19 of the Town and Country Planning (Assessment of Environmental Effects) Regulations 1995) incorporating:

Annex A - Vehicle Movements and Waste  
Annex B - Ash reuse  
Annex C - Best Available Techniques  
Annex D - District Heating  
Annex E - Carbon  
Annex F - Example Traffic Plan  
Annex G - Wind Assessment  
Annex H - Newt Mitigation

Annex H - Newt Mitigation Plan  
Annex I - Method Statement for Reptiles and Birds  
Annex J - Flood Risk Assessment  
Annex K1 - Geotechnical Report 2007  
Annex K2 - Ground Investigation 2003  
Appendix L - Regulation 19 Letter  
Annex J - Flood Risk Assessment

- vi) The letter from VESS to Shropshire Council dated 26th February 2010 providing further clarification on issues covered by the Regulation 19 response.

**Reason:** To define the permitted development.

#### TRAFFIC AND ACCESS

- 4a. Operations shall not commence at the EWF unless the access scheme shown on the approved circulation plan (reference 112-0) has been implemented in full.
- b. Following the bringing into use of the EWF, except in case of emergencies, no access to or egress from the Site shall take place other than by means of the approved access arrangements as shown on plan reference 112-0.
- c. The gates to the staff / emergency access shall be maintained in a closed and locked position, except in case of emergencies, records of which shall be made available to the Local Planning Authority upon prior request.
- d. Details of arrangements for pedestrian access to the Site including gating shall be submitted for the prior approval of the Local Planning Authority and the approved details shall be implemented prior to the EWF Commissioning Date.

**Reason:** To ensure that the Site access is constructed to a satisfactory standard (4a) and in the interests of highway safety (5a,b,c). In the interests of pedestrian safety and Site security (5d).

- 5a. Prior to the EWF Commissioning Date details for the safe management of waste vehicles exiting the site shall be submitted to and approved in writing by the Local Planning Authority. Any waste traffic exiting the site shall thereafter do so in accordance with the approved site management details.
- b. Prior to the EWF Commissioning Date the operator will erect a road sign of an agreed specification and in an agreed location at the Site access to instruct drivers of HGVs visiting the EWF of routing arrangements to and from the Site.

**Reason:** In the interests of highway safety (6a) and to ensure that drivers of HGV's visiting the EWF are aware of the approved access route (7a).

- 6a. Prior to the Commencement Date full engineering details including road specification, drainage and street lighting of the new access road serving the site from Vanguard Way roundabout shall be submitted to and approved in writing by the Local Planning Authority. The development hereby permitted

shall not be first brought into use until the highway works have been constructed in accordance with the approved details.

- b. Prior to the EWF Commissioning Date all parking / turning / servicing areas shall be surfaced and marked in accordance with the approved circulation plan (ref 112-0).

**Reason:** In the interests of highway safety (8a). To ensure that the new traffic parking and circulation arrangements are marked out prior to the bringing into use of the EWF in the interests of traffic safety (8b).

- 7a. Within 6 months of the EWF Commissioning Date the operator shall submit for approval in writing of the Local Planning Authority a detailed Travel Plan which shall use as its base a survey of staff and other personnel to ascertain the patterns of travel to and from the development and attitudes and views about the use of different forms of transport. The Travel Plan shall include as a minimum the following initiatives and commitments in relation to travel to and from the development:

- a) to promote and enable increased use of walking, cycling and public transport as alternatives to the car;
- b) to increase awareness of and improved road safety and personal security;
- c) to carry out dialogue and consultation with adjacent/neighbouring tenants / businesses;
- d) to identify targets focused on reductions in the level of car use;
- e) to identify a monitoring framework, based on an annual survey, to enable the Travel Plan to be reviewed and updated as appropriate;
- f) to identify a nominated member of staff or post to act as Travel Plan Coordinator.

- b. The operator shall use all reasonable endeavors to implement the commitments set out in the Travel Plan following its approval by the Local Planning Authority.

**Reason:** To promote more sustainable modes of travel to and from the proposed Site.

#### LITTER

- 8a. No waste shall be delivered to the Site until a management scheme for control of windblown litter in the immediate vicinity of the Site, which is attributable to Site operations, has been submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall in particular provide for removal of litter from the margins of the Site, the stream corridor to the immediate north of the Site, and from the highway frontage at Vanguard Way.

- b. A daily visual inspection of the Site and its boundaries shall be undertaken to identify the potential for litter to escape and all practicable measures shall be taken to prevent the release of litter from the Site including:

- i) picking up any loose litter present outside approved storage areas, including within the yard area and on peripheral fencing;
- ii) the netting of storage facilities containing litter where there is a danger of such litter being liberated by wind;
- iii) keeping doors closed when not required for access or egress from the Integrated Waste Management Facility building; and
- iv) consideration of opportunities for reducing the size of the door aperture where frequent access is required.

**Reason:** To minimise the potential for the Site to generate windblown litter and any associated potential for adverse impact to the local environment and amenities.

#### TYPE OF WASTE

9a. The principal uses of the facility shall be restricted to:

- i. the receipt, handling, temporary storage, and incineration of municipal and commercial wastes;
- ii. the receipt, handling, temporary storage, bulking up, and transfer of recyclable materials and green waste derived from the recycling of municipal waste;
- iii. ancillary operations associated with the above activities such as the temporary bulking up and transfer of municipal wastes if required during periods of maintenance for the EWF.

b. Subject to any additional constraints which may be imposed by the Waste Permit, the following types of waste may be accepted and handled as necessary within the specified areas of the facility:

i) Energy from Waste Facility:-

The waste materials to be delivered to the EWF shall be restricted to inert and non-hazardous wastes derived from the following principal sources:

- municipal waste, collected by, or on behalf of, the Waste Collection Authority;
- non-hazardous commercial waste and other wastes of a similar nature to municipal waste delivered by others;
- street sweepings and litter arising from the statutory duties of the local councils;

The EWF shall not accept wastes delivered directly by householders or businesses in private vehicles.

ii) Materials Recovery Facility

The wastes to be delivered to the Materials Recovery Facility shall be restricted to:

- separately collected recyclable materials, collected by or on behalf of the WCA or Waste Disposal Authority;

- recyclable materials delivered to the HWRC by members of the public pending removal for recycling elsewhere;
- Parks and gardens waste generated by the local councils.

iii) Household Waste Recycling Centre:-

The Household Waste Recycling Centre shall receive wastes delivered by members of the general public in private vehicles only, for onward movement to the Materials Recovery Facility or EWF as appropriate:-

**Reason:** To define the type and sources of waste permitted to be managed, handled and recycled at the Site in accordance with the approved scheme, in the interests of general amenity and to protect surface and groundwater from pollution.

10. There shall be no direct sale of materials from the Site to the general public.

**Reason:** To define the planning permission and to restrict uses likely to generate traffic at the Site.

11. Prior to the Commencement Date a detailed Site Waste Management Plan (SWMP) shall be submitted to and approved in writing by the Local Planning Authority. The SWMP shall identify the main waste materials expected to be generated by the development during construction and subsequent operation of the Site and set out measures for dealing with such materials in an environmentally acceptable way, including:

- i. A review of any additional information on waste generated prior to the construction phase including detailed site investigation activities and contract documentation;
- ii. Confirmation of the intended arrangements for managing construction waste (including the re-use of bulk earthworks on site)
- iii. Confirmation of the proposed measures for waste minimization during the construction phase and during subsequent site operation.

**Reason:** To comply with the requirements of The Site Waste Management Plans Regulations 2008 and to supplement the preliminary SWMP in the Supporting Statement accompanying the planning application.

#### CONTROL OF WASTE TONNAGES

- 12a. The maximum total tonnage of waste imported on to the Site in any calendar year including the EWF and the existing waste management facility shall not exceed 140,000 tonnes. For the avoidance of doubt a calendar year shall comprise the period between 1st January and 31st December.
- b. Notwithstanding condition 14a, the maximum tonnage of waste processed by the EWF in any calendar year shall not exceed 95,000 tonnes.
  - c. The Site operator shall maintain a record of the tonnage of waste delivered to the Site per day, the numbers of HGVs delivering waste and the number of HGVs exporting residues and their destinations. The record shall be made

available to the Local Planning Authority upon prior written request. A report of the total tonnage of waste imported to the Site in each successive calendar year shall also be provided to the Local Planning Authority in writing within one month of the year end.

**Reason:** To ensure that the development remains within the levels of capacity specified in the planning application (12a) and to facilitate the proper monitoring of the development by the Local Planning Authority (12b).

#### EXTERNAL STORAGE

13. Storage of all general household/municipal and commercial wastes, fridges/white goods and other electrical items, abandoned vehicles and scrap, clinical waste and asbestos cement products shall take place either under cover or within secure containers awaiting transport from the Site or delivery to the EWF as appropriate.

**Reason:** To ensure that proposals for external storage can be adequately accommodated within the overall Site layout and in the interests of general and visual amenity.

#### WASTE PROCESSING

14. The waste processing operations which may be carried out at the Site under the terms of this permission shall be restricted to those specified in the plan entitled 'Battlefield Energy form Waste Facility – Proposed Layout' (reference 110-0) accompanying the Environmental Statement. For the avoidance of doubt, with the exception of and those operations specified under Conditions 16a and 16b below no other waste processing operations shall take place at the Site except:
  - i. the manual removal of recyclable materials from the waste delivered by the public into the HWRC,
  - ii. the manual removal of recyclable materials from the waste delivered by and on behalf of the Waste Collection Authority into the MRF/WTS.

**Reason:** In accordance with the approved scheme and the interests of general amenity and to ensure that the uses and operations hereby approved are satisfactorily accommodated within the Site.

15. No baling, use of screening or crushing plant or shredding shall occur at the Site unless a scheme or schemes detailing such proposals has first been submitted to and approved in writing by the Local Planning Authority. The sole exception shall be pre-shredding associated with operation of the Energy from Waste Facility as detailed in the application documents.

**Reason:** To define the planning permission in accordance with the approved details and to protect local amenities.

#### NOISE

16. Noise levels generated by normal operations shall not exceed 53 dB LA<sub>eq</sub> (1 hour) (free field) when measured at any point on the yellow line shown in the Figures in Annex D4 of Appendix D of the Environmental Statement. For the avoidance of doubt, “normal operations” shall be taken as meaning the operation and maintenance of the EWF.

**Reason:** To define a noise limit allowing control of Site operations so as to minimise the possibility of adverse noise impact at the closest receptor locations.

- 17a. The following noise attenuation measures shall be applied during the construction phase, and during subsequent operation of the site:

i. All vehicles and mechanical plant employed at the Site shall be fitted with effective exhaust silencers which shall be maintained in good efficient working order.

iii. Inherently quiet plant and machinery shall be used where appropriate including:

- selection of sound reduced compressors fitted with acoustic enclosures where appropriate;
- fitting of mufflers or silencers in accordance with manufacturers' recommendations to all ancillary pneumatic percussive tools employed at the Site.

iii. Machines in intermittent use shall be shut down or throttled down in the intervening periods when not in use or throttled down to a minimum.

iv. All ancillary plant such as generators, compressors and pumps shall be positioned so as to cause minimum noise disturbance;

- b. All fixed and mobile plant based at and operating within the Site shall be fitted with attenuated reversing alarms. Details of the types of reversing alarm proposed to be fitted to vehicles / plant under the terms of this condition shall be submitted for the approval in writing of the Local Planning Authority prior to the EWF Commissioning Date.

*Advisory: Staff arriving and departing from the Site shall be instructed to do so with minimum noise disturbance, particularly during nights and at weekends.*

**Reason:** To minimise the possibility of adverse noise impact from construction and subsequent Site operations at the closest receptor locations.

18. Prior to the EWF Commissioning Date the operator shall submit for the approval of the Local Planning Authority a scheme providing for the monitoring of noise levels attributable to the EWF.

**Reason:** To allow levels of noise at the operational EWF to be monitored at agreed intervals and locations in order to compare noise levels resulting from the fully operational facility with levels specified in relevant guidance and the

levels specified in the Environmental Statement in the interests of noise control.

#### AIR QUALITY

19a. Prior to the EWF Commissioning Date the operator shall submit a dust monitoring scheme for the approval in writing of the Local Planning Authority. The submitted scheme shall include provision for an initial survey at agreed receptor locations surrounding the site at an agreed period following the EWF Commissioning Date to establish the validity of the predictions in the Environmental Statement and for subsequent monitoring in the event that verifiable complaints attributable to dust emission from the Site are subsequently received.

b. Following its approval by the Local Planning Authority the scheme required by Condition 19a shall be implemented in accordance with the approved details.

**Reason:** To allow levels of dust at the operational site to be monitored at agreed locations following the EWF Commissioning Date and to facilitate further dust monitoring in the event that verifiable complaints relating to dust impact are subsequently received.

20a. Prior to the EWF Commissioning Date the operator shall submit a dust management scheme for the operational phase for the approval in writing of the Local Planning Authority. The submitted scheme shall be designed to ensure that operations during the construction and operational phase are carried out in such a way that emissions to air of dust are minimised so far as is reasonably practicable and that best practicable means are employed to avoid the creation of a statutory nuisance, including implementation of the following measures:

- i. identification of dust generating activities;
- ii. action plans to minimise emissions into the atmosphere from dust generating activities;
- iii. measures to ensure that all personnel on any construction or demolition site recognise the importance of dust minimisation and that relevant personnel are aware of how to control dust emissions.

b. Following its approval by the Local Planning Authority the scheme required by Condition 20a shall be implemented in accordance with the approved details.

**Reason:** To reduce the impact on local amenities and air quality of dust arising from Site operations.

21a. All yard surfaces and circulation areas within the Site shall be swept as necessary to remove mud / debris and water shall be applied to such areas as appropriate during dry conditions in order to prevent the generation of dust.

b. The exhaust systems of all vehicles and plant operating within the Site shall be maintained in full accordance with manufacturer's recommendations.

- c. All loads of waste, recycled materials or ash which the operator imports to or exports from the Site shall be sheeted or otherwise contained.
- d. All handling and storage of waste, recycled materials and ash on Site shall be carried out within an enclosed building or within the extended Household Recycling Centre area.

**Reason:** To reduce the impact on local amenities and air quality of dust arising from Site operations.

- 22. With the exception of the EWF process hereby approved, no waste shall be burned at the Site under the terms of this permission.

**Reason:** To safeguard local amenities and to safeguard the air environment from pollution.

- 23a. An odour and bioaerosol management plan shall be submitted for the approval in writing of the Local Planning Authority Prior to the EWF Commissioning Date. The scheme shall incorporate the following measures:

- i. Installation of an odour suppression system within the Tipping Hall.
- ii. Dispatch of waste to the EWF on a "first in - first out" basis in order to minimise the storage time for individual loads, waste imported to the Site shall be dispatched to the EWF.
- iii. Maintenance of roller shutter doors within the Waste Transfer and EWF Buildings in a closed position wherever possible.
- iv. Proposals for pre-monitoring of odour and bio-particulates to establish existing background levels in the vicinity of the Site;
- v. Proposals for initial post-monitoring of odour and bio-particulates to establish levels of odour and bio-particulates in the period following the EWF Commencement Date;
- vii. proposals for monitoring of odour and review of odour control measures;

- b. Following its approval by the Local Planning Authority the scheme required by Condition 23a shall be implemented in accordance with the approved details.

**Reason:** To ensure that operations at the Site are supported by appropriate systems and management arrangements to safeguard local air quality.

#### OFF SITE NOISE AND DUST MONITORING

- 24a. A scheme detailing proposals for off-site monitoring of noise and dust at appropriate publicly accessible locations around the site shall be submitted to and approved in writing by the Local Planning Authority prior to the EWF Commencement Date. The scheme required by this condition shall make provision for the following:

- i. an initial period of noise and dust monitoring at an agreed period following the EWF Commencement Date.
- ii. provision for subsequent noise and / or dust monitoring at an agreed

location or locations in the event that subsequent verified complaints are received in relation to noise and / or dust.

- b. Following its approval by the Local Planning Authority the scheme required by Condition 24a shall be implemented in accordance with the approved details.

**Reason:** To allow validation of the predictions included in the Environmental Statement in relation to noise and dust (24.i.) and to provide an appropriate mechanism to assist in the investigation of any noise and / or dust related complaints which may subsequently be received (24.ii.).

#### AMENITY COMPLAINTS PROCEDURE

- 25a. Prior to the Commencement Date the operator shall submit for the approval of the Local Planning Authority a scheme confirming procedures for dealing with complaints in relation to noise, dust, litter, odour and other amenity related matters. The submitted scheme shall set out a system of response to verifiable complaints of noise received by the Local Planning Authority. This shall include:

- i. investigation of the complaint;
- ii. report the results of the investigation to the Local Planning Authority;
- iii. implementation of any remedial actions agreed with the Authority within an agreed timescale.

- b. Following its approval by the Local Planning Authority the scheme required by Condition 24a shall be implemented in accordance with the approved details.

**Reason:** To put agreed procedures in place to deal with any noise complaints which are received during the construction phase or the subsequent operational phase.

#### PEST / VERMIN CONTROL

- 26. Prior to the EWF Commencement Date a detailed scheme for the control of pests and vermin shall be submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall in particular provide for:

- i. regular inspection of the Site by a qualified pest control expert, with records to be made available to the Local Planning Authority upon prior request;
- ii. measures to reduce the attractiveness of the Site to pests and vermin, including maintenance of a secure household waste and skip storage area and minimising the timescale for retention of waste at the Site;
- iii. a timetable for the prompt implementation of appropriate control measures in the event that a pest control problem becomes apparent, with details to be provided to the Local Planning Authority upon implementation of the measures.

**Reason:** To ensure that appropriate measures are in place to control the possible effects of pests and vermin.

## ENVIRONMENTAL MANAGEMENT SYSTEM

- 27a Prior to the Commencement Date, a Construction Management Plan providing further detailed clarification of environmental control procedures during the construction phase shall be submitted to and approved in writing by the Local Planning Authority. The scheme required by this condition shall incorporate the following details:
- i. construction and decommissioning noise limits,
  - ii. dust management measures,
  - iii. hours of working;
  - iv. wheel cleaning measures;
  - v. measures for protecting water resources;
  - vi. measures for handling wastes during construction;
  - vii. routing of construction traffic and deliveries;
  - viii. the phasing of the construction works;
  - ix. Details of the Environmental Management System to be employed by the contractor during the construction phase.
- b. The Construction Management Plan shall be implemented fully in accordance with the approved details for the duration of the construction works being carried out on the development site.
- c. Prior to the Commencement Date details of the arrangements for construction workers' compound including car-parking shall be submitted to and approved in writing by the Local Planning Authority.

**Reason:** to ensure that appropriate environmental management measures are put in place during the construction period in the interests of highway safety and general amenity (26a, 26b). To ensure that adequate space is provided for construction activities and associated parking / storage during the construction phase whilst facilitating the safe operation of the existing waste management facility prior to the EWF Commissioning Date (26c).

28. From the EWF Commissioning Date the operator shall implement an auditable Environmental Management System (EMS) to achieve ISO 14001 accreditation.

**Reason:** To implement an auditable system to ensure that the operator's stated environmental policy complies with relevant environmental laws and regulations.

## HOURS OF OPERATION

- 29a. The EWF which shall be entitled to operate for 24 hours a day and 7 days a week including during bank and public holidays under the terms of this permission. This shall include receipt of waste from the Tipping Hall / Waste Bunker. Other operations shall not be undertaken at the Site, except during the following hours unless otherwise approved in writing by the Local Planning Authority:

Delivery of waste to the Tipping Hall and transfer of waste within the site

- i) Waste delivered to the EWF or transferred within the Site for the purpose of incineration shall not be received other than at the Tipping Hall. Subject to condition 29a.ii below, the normal hours for delivery of waste to the Tipping Hall and transfer of waste within the Site under the terms of this permission shall be:

Mondays to Fridays	07.30 to 20.00 hours
Saturdays:	07.30 to 20.00 hours
Sundays / Bank Holidays	08.30 to 18.30 hours

- ii) Not more than 8 loads shall be delivered to the tipping hall outside of the period specified in condition 29a.i above.

Household Waste Recycling Centre:

- iii) Mondays to Saturdays 08:00 to 20.000 hours  
Sundays and Bank Holidays 09.00 – 18.00

Waste Transfer Station Building:

- iv) Unless otherwise approved in writing by the Local Planning Authority no wastes or recycled materials shall be received at or shall leave the Waste Transfer Station building except during the following hours:

Mondays to Fridays:	07:30 to 18:30 hours
Saturdays:	07:30 to 12:30 hours
Saturdays before or after Bank Holidays:	07.30 – 17.30 hours

Sundays / Bank Holidays – opening only on prior approval of the Local Planning Authority

Transfer of Waste / Material Between HWRC and WTS

- v) Notwithstanding Condition 19a(ii) above, the following additional hours of working shall apply exclusively for the internal Site transfer of material between the Household Waste Recycling Centre (HWRC) and the Waste Transfer Station:

Mondays to Fridays	07.30 to 20.00 hours
Saturdays:	07.30 to 20.00 hours
Sundays / Bank Holidays	08.30 to 18.30 hours

In relation to the transfer of material between the HWRC and the WTS the last 30 minutes of the working day at the Waste Transfer Station shall only be used for the loading / unloading of containers on the Site and general housekeeping measures at the end of the working day to ensure that the Site is in a clean and tidy condition prior to closure.

- b. Notwithstanding condition 29a, any exceptional arrangements to accommodate the delivery of household and commercial waste to the Site prior to or following a Bank / Public Holiday shall only be carried out in accordance with details previously approved in writing by the Local Planning Authority.

- c. For the avoidance of doubt the Site shall not be operated for the receipt or management of waste or to allow the delivery or removal of waste on Christmas Day, Boxing Day and New Year's Day with the exception of receipt of waste at the Tipping Hall and operation of the EWF.
- d. Works to construct the EWF and associated buildings and structures shall not take place other than between the hours of 07:30 and 19:30 hours on Mondays to Saturdays and 08.00 and 16:00 hours on Sundays. The sole exception shall be for minor construction / maintenance activities.

**Reason:** To ensure that operational times at the Site are controlled in accordance with the details specified in the planning application and in order to reduce the impact of the development and associated construction works on the local area.

#### BUILDINGS, STRUCTURES AND PLANT

- 30a. No building works shall commence at the Site under the terms of this permission until exact details of surface treatment works on the proposed buildings and structures including brickwork, cladding and colours (BS reference) have been submitted to and approved in writing by the Local Planning Authority.
- b. Where existing fencing or gating is proposed to be replaced or new fencing or gating provided as part of the development hereby approved, exact details of the types of fence or gate to be erected shall be submitted to and approved in writing by the Local Planning Authority prior to the EWF Commissioning Date.
- c. Exact details of the specifications and location for the wind screen to be installed on the south side of the HWRC extension shall be submitted to and approved in writing by the Local Planning Authority prior to the Commencement Date.
- d. Details of paving / external flooring specifications for the pedestrian area below the proposed site office shall be submitted to and approved in writing by the Local Planning Authority prior to the Commencement Date.
- e. Details of the green roof design and maintenance shall be submitted to and approved in writing by the Local Planning Authority prior to the Commencement Date.
- f. The specifications and colour of the roller shutter doors fitted to the EWF Buildings shall be submitted for the approval of the Local Planning Authority prior to the bringing into use of the EWF. Such doors shall be electrically operated and capable of opening and closing rapidly.
- g. The specifications required by Conditions 30a-f above shall be implemented in accordance with the approved details.

**Reason:** To ensure a satisfactory standard of construction and controls over construction operations (31a). To prevent unauthorised access to the Site and to ensure the Site is satisfactorily contained (31b). To confirm the details of the

proposed HWRC extension wind screen (31c). To confirm the proposed pedestrian area surfacing details of at the entrance to the EWF building (31d). To confirm the detailed construction and management measures for the proposed green roof (31e). To ensure that operations within the site buildings are capable of being satisfactorily contained in the interests of noise control (31f).

***Advisory note:** The cladding and roof treatment of the EWF building should be provided in a suitable low-reflectance material in order to reduce the visibility of the proposed building as seen from the surrounding area.*

31. All buildings, hard surfaces and fencing within and on the boundaries of the Site shall be maintained in an orderly state and fit for purpose for the lifetime of the development, including maintenance of even, pothole free running surfaces in circulation areas for vehicles and plant.

**Reason:** To ensure that the Site is maintained to an acceptable standard in the interests of health and safety and general amenity.

- 32a. The proposed buildings shall be designed in order to achieve a BRE Environmental Assessment Method (BREEAM) score of 'Good'. Evidence confirming this shall be submitted to and approved in writing by the Local Planning Authority prior to the EWF Commissioning Date.

- b. A scheme considering the potential for extending the green roof onto the roofs of the proposed Bottom Ash Hall / Workshop Building and turbine building shall be submitted for the approval in writing of the Local Planning Authority prior to the Commencement Date. Any details approved as part of this scheme shall be implemented prior to the EWF Commissioning Date.

**Reason:** To ensure that appropriate sustainable construction standards are employed in construction of the proposed development (32a). To assess the potential for provision of a green roof to the Bottom Ash Hall / Workshop Building having regard to ecology, sustainable urban drainage and climate change considerations (32b).

#### RENEWABLE ENERGY

- 33a. A scheme giving consideration to opportunities to incorporate small-scale renewable energy features into the detailed design of the proposed development shall be submitted to and approved in writing by the Local Planning Authority prior to the Commencement Date. The proposed scheme shall give consideration in particular to the potential for:

- b. The details approved as part of the scheme required by condition 35a shall be implemented prior to the EWF Commissioning Date unless otherwise approved in writing by the Local Planning Authority.

**Reason:** To allow for the incorporation of small-scale public art features into the development in the interests of general and visual amenity.

*Advisory note:* This decision notice is accompanied by a Section 106 Legal Agreement which amongst other matters incorporates measures to facilitate the establishment of a District Heating scheme using surplus steam from the EWF process.

## SIGNAGE

34. No sign or notice board shall be erected at the Site, either free standing or attached to a building or other structure, other than in accordance with details of the size and appearance, including colour and illumination, which have been previously approved in writing by the Local Planning Authority.

**Reason:** To ensure a satisfactory standard of development.

## LIGHTING

- 35a. Prior to the EWF Commissioning Date an external lighting scheme shall be submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall include the following details:

- hours of use of external lighting,
- the exact location and nature of any lights;
- the specification including height any fixed or mobile structures;
- the intensity of the lights;
- the identification of areas to be illuminated and any measures to prevent light spilling on to areas outside the Site;
- measures such as shrouding to minimise disturbance through glare;
- measures to minimise disturbance to bats (see informative below).
- Details of measures to minimise light spillage through translucent elements of the main EWF building and other internal lights

- b. No aviation warning light shall be fitted to the chimney unless details of the proposed lighting have first been submitted to and approved in writing by the Local Planning Authority.
- c. Following approval by the Local Planning Authority the schemes required by Conditions 35a and 35b shall be implemented in accordance with the approved details.

**Reason:** To ensure a satisfactory standard of lighting for the development, balancing health and safety and security requirements with the visual amenity and ecological considerations.

*Informative* - In the interests of minimising disturbance to bats consideration should be given in particular to:

- *Using low pressure sodium lamps or high pressure sodium instead of mercury or halide lamps,*
- *directing light downward to where it is needed and light spillage avoided, through design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct light to the intended area only,*

- *reducing the height of lighting columns to a minimum and directing light so as to reduce horizontal spill,*
- *ensuring light levels are as low as guidelines allow and lighting is not used if not needed,*
- *ensuring that lights on the north side of the site do not remain constantly on overnight,*
- *avoiding placing external lights on the building facing the brook and should be located as far away from the Battlefield Brook corridor as possible.*

#### GENERAL PERMITTED DEVELOPMENT ORDER

36. Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) Order 1995 (or any order revoking and re-enacting that Order with or without modification), no buildings, portacabins, fixed plant, or structures of the nature of buildings or fixed plant, and no fence or soil mound, in addition to those shown on the approved plans listed in condition 3 above, shall be erected at the Site unless approval in writing for their details and specification has first been obtained from the Local Planning Authority. The only exceptions to this shall be temporary compounds and stockpiles associated with the construction of the permitted Site, notwithstanding that these shall not be provided below the 69.7 metre a.o.d. contour level.

**Reason:** To ensure that the development remains in accordance with the available capacity within the Site and to ensure that there will be no increased risk of flooding by maintaining the flow and storage capacity of Battlefield Brook and its floodplain.

#### VEHICLE PARKING

- 37a. Vehicles shall not be parked at the Site other than within the designated areas identified in the approved plan reference Drawing 110-0 (Proposed Layout) submitted in support of the planning application.
- b. Vehicles employed or parked at the Site shall be limited to Refuse Collection Vehicles (RCV's), Waste Transfer Vehicles, Site plant and employee/visitors' cars. In particular there shall be no servicing/maintenance of vehicles at the Site other than those RCV's, Waste Transfer Vehicles and Site plant associated with the operation of the Site.

**Reason:** To ensure that vehicle parking can be adequately accommodated within the overall Site layout in the interests of safety and general and visual amenity (37a) and to ensure that ancillary activities are properly controlled in the interests of general amenity (37b).

#### GROUND LEVELS

- 38a. A detailed plan confirming the existing and proposed contours within the Site shall be submitted to and approved in writing by the Local Planning Authority prior to the Commencement Date.

- b. No works to construct any building at the Site shall commence unless exact details of floor levels within the building have first been approved in writing by the Local Planning Authority.
- b. Following approval of the details required by Conditions 38a and 38b by the Local Planning Authority the development shall be implemented so as to ensure that ground levels within the site comply with the approved details.
- c. There shall be no changes to the final ground levels within the Site above the 67.819 metre AOD contour as shown on the plan required by Condition 37a unless such details have first been submitted to and approved in writing by the Local Planning Authority.

**Reason:** To ensure that floor/ground levels are not raised during Site development works to an extent that would affect the visual and general amenities or drainage interests in the surrounding area.

#### DRAINAGE AND FLOOD MITIGATION

39. No development approved by this permission shall be commenced until a scheme for the provision of foul and surface water drainage works during both construction and operation has been submitted to and approved in writing by the Local Planning Authority. The scheme required by this condition shall in particular provide for the following with respect to the operational phase:
- measures to control surface water run-off incorporating SUDS including attenuation of excess roof water not used in the vehicle washing area prior to discharge and incorporation of an adequately sized oil interceptor for drainage of operational and parking areas;
  - location of all areas to be used for handling of waste or other where other potentially polluting activities would take place on suitable impermeable surfaces with sealed drainage;
  - no discharge of foul or contaminated drainage into groundwater or any surface waters;
  - an acceptable method of foul drainage;
  - separating foul drainage from uncontaminated roof and surface water;
  - the interception and storage of contaminated water used in fire fighting;
  - proposals for adequate maintenance and appropriate ongoing assessment of the integrity of the waste bunker.

The drainage works shall be completed in accordance with the details and timetable of the approved scheme.

**Reason:** To prevent the increased risk of flooding by ensuring the provision of a satisfactory means of surface water disposal and to safeguard surface and groundwater from pollution.

- 40a. Any facilities for the storage of oils, fuels or chemicals shall be Sited on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound shall be at least equivalent to the capacity of the tank plus 10%. If there is multiple tankage, the compound shall be at least

equivalent to the capacity of the largest tank, vessel or the combined capacity of interconnected tanks or vessels plus 10%. All filling points, associated pipework, vents, gauges and sight glasses must be located within the bund or have separate secondary containment. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipework shall be located above ground and protected from accidental damage. All filling points and tank/vessels overflow pipe outlets shall be detailed to discharge downwards into the bund.

**Reason:** To prevent pollution of the water environment.

- 41a. The 67.819m above ordnance datum (AOD) contour shall be physically marked on Site and the markers shall be maintained in position unless otherwise first approved by the Local Planning Authority.
- b. Land at 67.819m AOD or lower) shall not be developed and no permanent increases in ground levels shall take place below this level at the Site.
- c. No temporary storage of materials within the margins of the floodplain shall take place during the construction phase unless details of such storage have first been submitted to and approved in writing by the Local Planning Authority.

**Reason:** To allow physical demarcation of the extent of the 67.819m AOD contour corresponding to the identified 1 in 100 year event flood level within the Site (41a) and in the interests of flood protection / prevention (41b).

- 42a. Prior to the EWF Commissioning Date a scheme for the management and maintenance of the Battlefield Brook within the northern boundary of the Site shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include the following details:
  - i. measures to protect and enhance biodiversity and management of vegetation;
  - ii. provision of a 10m minimum buffer zone from the edge of the watercourse.
  - iii. details of proposed maintenance measures for the stream corridor within the Site to control bramble spread
- b. Following approval of the scheme required by this condition management of the watercourse shall be carried out in accordance with the approved details.

**Reason:** To provide flood risk reduction and wider enhancements to the watercourse / associated ecological corridor, and ensure management and maintenance of the water corridor within the Site for the lifetime of the development.

***Advisory:*** A precautionary approach to strimming should be adopted during site clearance in the interests of ecology, in accordance with the further information provided as part of the Regulation 19 response entitled 'precautionary method of working in respect of breeding birds and reptiles' dated September 2009.

- 43a. Prior to the commencement of development a scheme confirming the details of the detention balancing pond and the GCN mitigation pond including cross-sections shall be submitted to and approved in writing by the Local Planning Authority. The scheme required by this condition shall include:
- i. Provision to relocate the GCN mitigation pond so that it is located above the flood plain level of 67.819m AOD unless otherwise approved;
  - ii. Confirmation of the design features which will be implemented in order to ensure that the potential ecological value of these areas are realised and sustained, along with the water quality and water quantity requirements.
  - iii. Confirmation of the measures it is proposed to implement in order to manage and maintain the pond features for the lifetime of the development to maintain flood risk reduction and biodiversity benefits.
- b. Following its approval by the Local Planning Authority the scheme required by Condition 43a shall be implemented in accordance with the approved details.

**Reason:** To ensure that the specifications of the proposed detention balancing pond and the GCN mitigation pond are acceptable in relation to drainage and ecological considerations.

*Advisory:* In the event that the scheme required by this condition conflicts with the details which are subsequently required under the DEFRA licence the latter shall prevail.

## ECOLOGY

### Integrated Protected Species Mitigation Statement

- 44a. Prior to the Commencement Date a statement providing further clarification of protected species mitigation provisions to supplement the information submitted in support of the application shall be submitted to and approved in writing by the Local Planning Authority. The mitigation statement required by this Condition shall detail the relative timings for implementation of individual mitigation measures prior to and during construction, as part of an integrated mitigation process. The statement shall also incorporate a plan or plans detailing the following:
- i. the exclusion areas / buffer zones for safeguarding protected species and their habitats;
  - ii. the exact position of the proposed Great Crested Newt mitigation pond relative to the flood plane level;
  - iii. details of all new habitat areas to be created, including as part of the on site landscaping and off-site planting proposals linked to the current application.
- b. Operations shall take place in accordance with the approved integrated protected species mitigation statement unless otherwise first approved in writing by the Local Planning Authority.

**Reason:** To provide further clarification of the proposed measures to minimise the possibility of adverse impact to protected species and to avoid potential conflicts in timing between individual elements of the mitigation procedures (45a). To provide flexibility for minor changes to the details of the approved protected species mitigation statement (45b).

- 45a. Prior to the Commencement Date a further survey to determine the presence of badgers within and on the margins of the Site shall be undertaken in order to update the findings of the Ecological Reports accompanying the Environmental Statement. Details of the survey and of the associated recommendations in relation to protected species shall be submitted to and approved by the Local Planning Authority prior to the Commencement Date.
- b. The scheme referred to in condition 46a shall incorporate measures to protect badgers including provision for a crossing if necessary in any identified risk area and for maintenance of a 20m exclusion zone around the sett.

**Reason:** To provide further clarification of the measures which it is intended to apply in order to minimise the possibility of adverse impact to protected species and to allow for the situation to be reviewed nearer to the Commencement Date.

*Informative: All species of bats found in the UK are European Protected Species under the Habitats Directive 1992, the Conservation of Species and Habitats Regulations 2010 and the Wildlife & Countryside Act 1981 (as amended). Trees on the northern bank of Battlefield Brook outside the application site have been noted as having bat roost potential. Should the need arise to carry out works on these trees, a bat survey is recommended. If a bat should be discovered on site at any point during the development then work must halt and Natural England should be contacted for advice.*

#### Habitat Management Plan (Post Construction)

- 46a. Prior to the EWF Commissioning Date a habitat management plan shall be submitted to and approved in writing by the Local Planning Authority. The plan shall provide further clarification of the habitat management measures which it is proposed to implement following construction in order to supplement the information provided in support of the planning application. The plan shall in particular include the following information:
- i. Details of proposed measures for management of:
- proposed tree / woodland areas (including off-site planting);
  - grassland;
  - the stream corridor;
  - the proposed pond;
  - management of badger habitat.

- ii. Confirmation of measures to maintain a 10 metre buffer zone along the bank of the brook adjacent to the site to limit possible disturbance to badgers and Water Vole populations.
- b. Operations shall take place in accordance with the approved habitat management plan unless otherwise first approved in writing by the Local Planning Authority.

**Reason:** To ensure the short, medium and longer term success of the mitigation and landscaping works (47a). To provide flexibility for minor changes to the details of the approved protected species mitigation statement (47b).

#### ON-SITE LANDSCAPING AND AFTERCARE

- 47a. Prior to the EWF Commissioning Date a scheme for the permanent landscaping / screening and supplementary planting of the Site shall be submitted for the approval in writing of the Local Planning Authority. The approved scheme shall be implemented within the first available planting season following the approval of the scheme in writing by the Authority and shall include:
  - i. a detailed plan of the location of the proposed planting areas to supplement the Indicative Landscape Masterplan (Figure 4.1) accompanying the Environmental Statement;
  - ii. details and specification of planting including the species, specification, origin, method and density of planting, protection, addition of soil ameliorants, with emphasis on improved containment of the Site and the creation of diverse habitats on the line of the brook;
  - iii. confirmation of detailed landscaping proposals within the river corridor, including a 10 metre buffer strip adjacent to the watercourse;
  - iv. a timetable for implementation.
- b. All existing hedgerows, shrubs and trees on the margins of the Site and all new planting at the Site shall be retained and protected from damage for the duration of the operations hereby approved. In particular, no use or operation hereby permitted or required shall be carried out in such a manner as to cause damage to or removal of such vegetation.
- c. A scheme detailing proposals for management of vegetation within the Site, including the watercourse corridor and associated 10m buffer zone shall be submitted to and approved in writing by the Local Planning Authority prior to the EWF Commissioning Date. The submitted scheme shall be designed amongst other matters to ensure that a robust vegetation screen is established and subsequently maintained along the northern façade of the EWF building, for the duration of the operations hereby approved.

**Reason:** To safeguard the interest of local amenities and those of adjacent land uses by reducing the visual impact of the proposal (47a,b,c) and in the interests of ecology and surface drainage (47c).

- 48a. All new planting within the Site shall be subject to aftercare / maintenance for a period of 5 years following planting, including weeding and replacement of failures.

**Reason:** To ensure that new planting becomes properly established in the interests of visual amenity and ecology.

#### ARCHAEOLOGY

- 49a. An archaeological watching brief shall be carried out during first soil stripping at the Site and the developer shall allow sufficient time and resources within the construction timescale for appropriately qualified personnel to record any archaeological remains which may be uncovered by the excavation/soil stripping works.

- b. Not less than one week's prior notice shall be given in writing to the Local Planning Authority of the intended date for first stripping of soil within the Site.

**Reason:** To allow any archaeological remains which might be uncovered during the construction works to be recorded in this location close to an historic battlefield Site.

#### ANNUAL REVIEW

50. A scheme outlining arrangements for the review of Site operations shall be submitted by the operator for the approval in writing of the Local Planning Authority not later than one month following the EWF Commencement Date. The scheme shall make provision for the following:

- i. The agreed frequency of meetings to review site operations and associated environmental and ecological mitigation procedures, involving the operator, the Local Planning Authority and other interested parties;
- ii. A procedure incorporating the documentation of any complaints received in connection with Site operations, investigation of the cause of the complaint and provision for taking appropriate remedial action.

**Reason:** To provide a suitable mechanism for the ongoing review of Site operations.

#### DECOMMISSIONING

52. Not less than 6 months prior to any planned date for the permanent decommissioning of the development hereby approved the operator shall submit proposals for decommissioning of any elements of the development which are not required in connection with the subsequent afteruse of the Site. Such plans shall make provision for leaving the site in a condition suitable for future development.

**Reason:** To ensure that the Site is left in an appropriate condition for future development following any permanent decommissioning of the development hereby approved, having regard to the nature and location of the development.

## RETENTION OF APPROVED DOCUMENTS

53. A copy of this planning permission and any schemes permitted under its terms and conditions shall be retained at the Site and be available for inspection by staff at the Site and officers of the Local Planning Authority.

**Reason:** To ensure staff on Site are aware of planning controls to be complied with.

### 15.0 REASONS FOR APPROVAL:

- 15.1 The reasons for approval are listed in section 11 of this report. Overall, taking into account the Development Plan and other material considerations and subject to the planning conditions listed in section 13, it is considered that the proposed development would comply with key local, regional and national objectives for waste management and would not give rise to unacceptably adverse impacts on the environment, local amenities or other interests of acknowledged importance. In reaching the decision to recommend approval of the application full account has been taken of the information contained within the planning submission, the supporting Environment Statement, the further information provided by the applicant and the relevant planning policies and guidance. Responses from planning consultees and representations submitted by members of the public have also informed the planning recommendation.

### 16.0 POLICIES MATERIAL TO THE DETERMINATION OF THE APPLICATION

- 16.1 In determining the Local Planning Authority gave consideration to the policies listed in section 8 of this report.

#### **INFORMATIVES**

None

#### **LIST OF BACKGROUND PAPERS**

Planning application reference SC/MS09/0125 and associated documents.

#### **Environmental Appraisal**

Included in the report

#### **Risk Management Appraisal**

Not applicable

#### **Community / Consultations Appraisal**

Included in the report

#### **Member Champion**

Not applicable

#### **Local Member**

Mr V.T.Bushell (Harlescott); (Adjacent Electoral Division: Mr M.Price (Battlefield))

#### **Appendices**

None

# APPENDIX 1

## HABITAT REGULATIONS ASSESSMENT

### Habitat Regulation Assessment (HRA) Screening Matrix

Application name and reference number:

SC/MS2009/0125/SY – Battlefield Energy from Waste Facility, Vanguard Way, Battlefield Enterprise Park, Shrewsbury, Shropshire

Date of completion for the HRA screening matrix:

17 June 2010

HRA screening matrix completed by:

Fran Lancaster  
Planning Ecologist  
Shropshire Council

01743 252578

[fran.lancaster@Shropshire.gov.uk](mailto:fran.lancaster@Shropshire.gov.uk)

**Table 1: Details of project or plan**

Name of plan or project	SC/MS2009/0125/SY – Battlefield Energy from Waste Facility and extension to the existing household recycling centre, Vanguard Way, Battlefield Enterprise Park, Shrewsbury, Shropshire
Name and description of Natura 2000 site	<p>Four Natura 2000 sites are within 10km of the proposed site:</p> <p><b>Hencott Pool Midland Meres &amp; Mosses Ramsar Phase 2</b> – Designated for its Carr habitats and the species <i>Carex elongata</i> and <i>Cicuta virosa</i></p> <p><b>Fenemere Midland Meres &amp; Mosses Ramsar Phase 1</b> – Designated for its open water, swamp, fen, wet pasture and carr habitats with the species <i>Cicuta virosa</i> and <i>Thelypteris palustris</i></p> <p><b>Berringtonne Pool Midland Meres &amp; Mosses Ramsar Phase 1</b> – Designated for its open water, swamp and fen habitats</p> <p><b>Bomere, Shomere &amp; Bettonne Pools Midland Meres &amp; Mosses Ramsar Phase 1</b> – Designated for its open water, swamp, basin mire and carr habitats with the species <i>Elatine hexandra</i> and <i>Thelypteris palustris</i></p>
Description of the plan or project	<p><b>Energy from Waste Facility and extension to the existing household recycling centre</b></p> <p>The development comprises development of an Energy from Waste Facility with offices, ancillary buildings and plant and construction of an extension to the adjacent household recycling centre.</p> <p>The site occupies an area of 4.3ha and comprises a vacant plot and the existing household recycling centre within the Battlefield Enterprise Park approximately 4km north of the centre of Shrewsbury.</p>

	<p>The Energy from Waste Facility will comprise the following key elements: Gatehouse, Tipping Hall, Waste Bunker Hall, Boiler Hall, Turbine Hall, Chimney, Bottom Ash Hall, Air Cooled Condensers, Control Room and Viewing Gallery, Workshop/Store, Waste Water Pit, Transformer Building, Fire Water Tank and Pump Room and Weighbridges.</p> <p>The extension to the household recycling centre will comprise: additional container bays, extension to the elevated parking/unloading area for use by the public and an extension of the down ramp for public egress from the site.</p> <p><b>Key effect pathways by which the proposal could potentially impact upon the Natura 2000 sites:</b></p> <ul style="list-style-type: none"> <li>- Release of potentially polluting substances (acid, lime, fuels etc) stored on site to be used in the process</li> <li>- Release of contaminated waste water</li> <li>- Release of particulates</li> <li>- Release of dioxins and heavy metals</li> <li>- Release of Carbon Dioxide and global warming potential</li> <li>- Emissions to air of NO<sub>x</sub>, Sulphur Dioxide (SO<sub>2</sub>), Ammonia (NH<sub>3</sub>), HF, Hydrogen Chloride (HCL), nutrient Nitrogen deposition and Acid deposition.</li> </ul>
<p>Is the project or plan directly connected with or necessary to the management of the site (provide details)?</p>	<p>No</p>
<p>Are there any other projects or plans that together with the project or plan being assessed could affect the site (provide details)?</p>	<p>Environment Agency does not consider that there are any likely in-combination effects.</p>

**The Significance test**

<p>Each potential effect pathway linking the Battlefield EFW proposal to the Natura 2000 sites will be dealt with in turn using the evidence provided in the application, in the Scott Wilson document and the draft Environment Agency permit decision.</p> <p><b>Release of potentially polluting substances (acid, lime, fuels etc) stored on site to be used in the process</b></p> <ul style="list-style-type: none"> <li>- Acid will be stored in bunded containers</li> <li>- Lime and activated carbon will be stored indoors</li> <li>- Urea will be located in a designated indoor storage room</li> <li>- All tanks will have 110% capacity bunds</li> <li>- The 30,000 litre underground storage tank for diesel will be double skinned and have an alarmed leak monitoring system</li> <li>- Bottom ash will be stored in an internal designated storage area, enclosed with sealed concrete hard standing and contained drainage</li> </ul>
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#### **Release of contaminated waste water**

- Drainage from the process systems, wash down waters from process areas and potentially contaminated water from roads and external areas of the installation will be routed into the waste water pit. The pit will be concrete lined and have a capacity of 60m<sup>3</sup>.
- Uncontaminated water will drain into Battlefield Brook via a drainage pond.
- Bypass oil separators will remove any possible organic contaminants and suspended solids from the water.
- Contamination of the brook during pollution incidents will be prevented via isolation valves.

#### **Release of particulates**

- Expected removal efficiency of the bag filters proposed for use as Best Available Technique is 95 – 99%. The use of a lime reagent in the bag filters will also result in small particles (less than 1 micron) being agglomerated into the filter cake.

#### **Release of dioxins and heavy metals**

- The primary method for minimising emissions of dioxins is by combustion control
- In addition dioxins and furans will be removed from flue gasses by particulate abatement, aided by the injection of activated carbon
- Particulate abatement is also the main means for minimising the release of the majority of metals.
- Bag filters and carbon injection will be used to control and minimise the release of heavy metals and dioxins and furans from the incineration process.
- The Environment Agency is satisfied that the proposals use the Best Available Techniques for minimising heavy metal and dioxin emissions.

#### **Release of Carbon Dioxide and global warming potential**

- The quantity of CO<sub>2</sub> released from the combustion process will be determined primarily by the quantity and characteristics of the waste incinerated.
- The export of electricity from the installation generated from the burning of waste will result in overall reductions in emissions of carbon dioxide, as virgin fossil fuels will not be used additionally elsewhere.
- NO<sub>x</sub> abatement is also part of this process, emissions of N<sub>2</sub>O from the NO<sub>x</sub> abatement system will be minimised through use of either an ammonia reagent or a urea reagent either of which represents Best Available Technique.
- The operator will be required to demonstrate to Environment Agency that the abatement systems have been optimised during the plant commissioning process
- The CO<sub>2</sub> released by the installation cannot be characterised as insignificant, however CO<sub>2</sub> released differs from other pollutants in that its effect on the environment is at a global rather than local scale. It would not be appropriate to set a CO<sub>2</sub> limit.
- The amount of CO<sub>2</sub> released will be determined by the quantity and characteristics of the waste to be incinerated; these aspects are already subject to conditions on the Environment Agency permit.

#### **Emissions to air of NO<sub>x</sub>, Sulphur Dioxide (SO<sub>2</sub>), Ammonia (NH<sub>3</sub>), HF, Hydrogen Chloride (HCL), nutrient Nitrogen deposition, and Acid deposition.**

Background pollution levels at the 4 relevant Ransar sites were obtained from the Air Pollution Information System ([www.apis.ac.uk](http://www.apis.ac.uk)) by Environment Agency on 30 April 2009:

**Hencott Pool** (Location: 349141, 316056)

NO<sub>x</sub> = 13.8 µg/m<sup>3</sup>  
 SO<sub>2</sub> = 1.6 µg/m<sup>3</sup>  
 NH<sub>3</sub> = 2.7 µg/m<sup>3</sup>  
 Nutrient Nitrogen Deposition = 23.7 Kg/ha/yr  
 Acid Deposition = 1.78 keq/ha/yr

**Fenemere** (Location: 344541, 322945)

NO<sub>x</sub> = 9 µg/m<sup>3</sup>  
 SO<sub>2</sub> = 1.1 µg/m<sup>3</sup>  
 NH<sub>3</sub> = 3 µg/m<sup>3</sup>  
 Nutrient Nitrogen Deposition = 24.9 Kg/ha/yr  
 Acid Deposition = 1.98 keq/ha/yr

**Berringtonne Pool** (Location: 352339, 307229)

NO<sub>x</sub> = 9.9 µg/m<sup>3</sup>  
 SO<sub>2</sub> = 1.5 µg/m<sup>3</sup>  
 NH<sub>3</sub> = 2.4 µg/m<sup>3</sup>  
 Nutrient Nitrogen Deposition = 23.4 Kg/ha/yr  
 Acid Deposition = 1.91 keq/ha/yr

**Bomere, Shomere & Bettonne Pools** (Location: 350088, 308307)

NO<sub>x</sub> = 11.0 µg/m<sup>3</sup>  
 SO<sub>2</sub> = 1.5 µg/m<sup>3</sup>  
 NH<sub>3</sub> = 2.4 µg/m<sup>3</sup>  
 Nutrient Nitrogen Deposition = 23.4 Kg/ha/yr  
 Acid Deposition = 1.791 keq/ha/yr

Environmental Benchmarks (EA took the value for the most sensitive habitat where a range of values is applicable in line with using the precautionary approach):

Pollutant	Objective	Time period
NO <sub>x</sub>	30µg/m <sup>3</sup>	Annual mean
SO <sub>2</sub>	20µg/m <sup>3</sup>	Annual mean
N deposition	10kg N/ha/yr	Annual average
Acid deposition	0.75 Keq/ha/yr 0.35 Keq/ha/yr (Fenemere)	Annual average
Ammonia	1µg/m <sup>3</sup>	Annual average
HF	5µg/m <sup>3</sup>	Daily
HF	0.5µg/m <sup>3</sup>	Weekly

The figures can be found in tables 2 – 5 in the Environment Agency draft document. The following conclusions are drawn by Environment Agency:

**Emissions of NO<sub>x</sub>, SO<sub>2</sub> and NH<sub>3</sub>** are not likely to have a significant effect on the interest features of the Ramsar sites alone or in combination as process contributions are less than 1% of the relevant environmental benchmark.

**Emissions of HF** are not likely to have a significant effect on the interest features of the Ramsar sites alone or in combination as process contributions are less than 1% of the relevant environmental benchmark.

**Deposition of nutrient nitrogen** is not likely to have a significant effect on the interest features of the Ramsar sites alone or in combination as process contributions are less than 1% of the minimum Critical Load for nutrient nitrogen deposition.

**Deposition of acid** – There are no likely significant effect at Fenemere, Berringtonne Pool, and Bomere, Shomere & Bettonne Pools both alone and in combination, as process contributions are less than 1% of the Critical Load.

**However, deposition of acid at Hencott Pool is 1.6% of the environmental benchmark, therefore a more detailed assessment of the predicted environmental concentration is required.**

### **Further Consideration of Acid Deposition at Hencott Pool**

The evidence base and the further consideration of Acid Deposition at Hencott Pool are detailed in page 55 onwards of the Environment Agency draft document.

'The precautionary approach to the modelling assumed the emissions of all acidic gasses would occur at the WID (Waste Incineration Directive) limits though in fact the emission levels will be considerably less than this, and are likely to be below 1% total acid Critical Load at Hencott Pool SSSI.'

'The Critical Load Function (Pg 56 of the EA draft document) demonstrates that, when considering Sulphur and Nitrogen deposition the input from the proposed installation will be insignificant. Thus whether the facility is there or not makes negligible difference to the already relatively high levels of acid deposition at the site.'

Based on comparisons from other cases of modelling compared to measured values once the incinerator is operational Environment Agency states that 'the process contribution dropped to below 0.9% of the total acid Critical Load.'

### **The Integrity test**

Environment Agency found that for Berringtonne Pool, Bomere, Shomere & Bettonne Pools and Fenemere all emissions from the proposed Energy from Waste Facility were below 1% of the relevant environmental benchmark and as such would have no effect on the integrity of the site.

**For Acid Deposition at Hencott Pool the Environment Agency concludes that 'thus whether the facility is there or not makes negligible difference to the already relatively high levels of acid deposition at the site.'**

### **Conclusions**

Environment Agency has concluded that 'there will be no likely significant effect on a European Site.'

Natural England has been consulted by Environment Agency and has agreed with the conclusion of Environment Agency.

Regulation 65(2) of the Conservation of Habitats and Species Regulations 2010 states:

(2) Nothing in regulation 61(1) or 63(2) requires a competent authority to assess any implications of a plan or project which would be more appropriately assessed under that provision by another competent authority.

In the case of application SC/MS2009/0125/SY – (Battlefield Energy from Waste Facility, Vanguard Way, Battlefield Enterprise Park, Shrewsbury, Shropshire) Shropshire Council is regarding the Environment Agency as the competent authority who would most appropriately assess the air pollution aspects of the planning application and as such, under Regulation 65(2) of the Conservation of Habitats and Species Regulations (2010), Shropshire Council has taken account of the evidence provided by the Environment Agency in the document Determination of an Application for an Environmental Permit under the Environmental Permitting (England & Wales) Regulations 2007 (Reference number EA/ERP/XP3239GF/A001).

In light of the evidence provided by Environment Agency as the most competent Authority to assess air pollution issues in relation to the EWF proposals and having regard to other relevant considerations including the response of Natural England dated 7th April 2010 confirming no objections with respect to air emissions **Shropshire Council concludes that there is no likely significant effect of the proposed Energy from Waste facility (application SC/MS2009/0125/SY) on any European Designated site.**

## APPENDIX 2

### PROTECTED SPECIES 'THREE TESTS' ASSESSMENT

Application name and reference number:

Battlefield Energy from Waste Facility  
MS2009/0125/SY

Analysis of three tests carried out by:

Grahame French, Senior Planner, Minerals and Waste and Dr Sue Swales, County Ecologist

**1 Is the proposed activity 'not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range'?**

Population size. Distance from pond.

A small/medium population (max. count of 10 adults per survey night) of Great Crested Newts has been identified at a breeding pond c. 160m to the north of the development site. Research commissioned by English Nature (Research Report 576) has shown that during mitigation work, by far the most captures of newts are within 50m of ponds and few animals are captured at distances greater than 100m. Although GCNs have been known to travel over 1km, the vast majority of individuals are found within 100m. Bearing this in mind, relatively few newts are likely to reach the development site. However, removal of terrestrial habitat immediately adjacent to the breeding pond, through building of the Food Enterprise Centre, may drive newts to range further towards the south and the hedgerow pointing south towards the EWF site is known to be used by GCNs as a corridor.

GCNs will be excluded from the site, and any other working or storage areas, to ensure none are harmed during site clearance and construction activities. No breeding ponds will be lost through the development but approximately 1.7ha of intermediate terrestrial habitat will be. Habitat is to be retained to the north and east of the buildings which will be enhanced for GCNs. A new pond is to be created (c. 5m X 23m), native scrub and trees to be planted and 3 to 4 refugia will be constructed along the southern bank of the Battlefield Brook. The hedgerow to the north of the site is to be reconnected to the scrub and trees on the northern bank of the brook. These measures have been detailed in a GCN mitigation statement which has been submitted with the application and its implementation will be covered by planning condition.

GCN embryos are sensitive to episodic reductions in pH. Emission levels are strictly regulated under the Air Quality Regulations and the EWF Facility has been designed to adhere to these emission levels. It will have extensive abatement equipment, conforming to the requirements of Best Available Techniques, as judged by the Environment Agency. Emissions will be monitored continuously and results reported to the EA as part of a permit to operate under the Pollution Prevention and Control Regulations. Control and monitoring of emissions will minimise the potential risk to GCNs from increased acidification. The applicants conclude that it is not expected that the increase in air borne emissions will result in long term significant impacts on the GCN population near to the site. A Pollution Prevention Programme will be implemented to prevent contamination of terrestrial and aquatic habitats by dust, run-off or spillages.

**Providing the above measures are undertaken, the development should not be detrimental to the maintenance of the populations of Great Crested Newts at a favourable conservation status in their natural range. The breeding pond, which appears to be deteriorating as habitat for GCNs, will be unaffected by the development and so the addition of a purpose built new pond on the development site, together with the proposed improvements to terrestrial habitat, have the potential to improve the conservation status of the local GCN population.**

**1 Is the development 'in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment'?**

The proposed EWF would form a key component in Shropshire's municipal waste management infrastructure, allowing residual municipal waste to be dealt with within the county and avoiding the need to transport such waste to landfills / waste management facilities outside of the county. This offers environmental and economic benefits in terms of reduced transportation and reductions in greenhouse gas emissions relative to the current route of landfilling such waste. In addition, the EWF process would allow renewable energy to be recovered from residual waste in the form of electricity (and potentially also heat through CHP). The government has acknowledged the benefits of renewable energy in documents including the UK Renewable Energy Strategy (July 2009) and the Climate Change Supplement to Planning Policy Statement 1.

## **2 Is there 'no satisfactory alternative'?**

As part of the Environmental Statement and associated further information the applicant has provided detailed evidence in support of the decision to adopt EWF as the preferred option for managing Shropshire's residual municipal waste. A range of technical limitations affecting other potential waste management solutions have been identified as part of this process which, the applicant advises, would render such processes inappropriate / unsuitable in the particular circumstances of Shropshire. It is considered that the applicant's conclusions can be accepted having regard to the particular requirements of Shropshire's waste management infrastructure.

The applicant has also set out the reasons for selecting the current site as the preferred location for the EWF. It is considered that the applicant has demonstrated that there are no other sites which are as satisfactory as the current site. This is having regard amongst other matters to the fact that the site is (1) allocated as a strategic centre for managing municipal waste in the Shropshire Waste Management Plan, (2) is adjacent to an existing waste management site with opportunities for integration of waste management functions and (3) is located on a modern business park with good connections to the primary road network. The applicant has undertaken a search for other potential sites which has failed to identify any more suitable locations. This validates the conclusions of work previously undertaken in connection with preparation of the Shropshire Waste Local Plan and the Shropshire Waste Management Strategy. These conclusions are supported.

## **APPENDIX 3**

### **GLOSSARY OF TERMS & ACRONYMS**

**1 in 100 year flood** - A flood event that has an annual probability of 1%.

**Airborne Noise** - Noise radiated directly from a source, such as a loudspeaker or machine, into the surrounding air.

**AOD** - Above Ordnance Datum – vertical height above mean sea level at Newlyn, Cornwall

**Aquifer** - A water-bearing stratum situated below ground level. The water contained in an aquifer is known as groundwater

**Baseline** - Existing Environmental Conditions

**Baseline Studies** - Work done to determine and describe the environmental conditions against which any future changes can be measured or predicted and assessed.

**Bottom Ash** - Also known as clinker, the principal residual material produced from an EWF.

**Combined Impact** - Interactions between various aspects of impact

**Construction Phase** - Period of construction work / activity taking place on site up until commissioning

**Contaminant** - An undesirable concentration or quantity of a substance, or activity concentration of a radionuclide, present in water, atmosphere or soil.

**Contaminated Land** - "...any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that: a. significant harm is being caused or there is significant possibility of such harm being caused; or b. pollution of controlled waters is being, or is likely to be, caused", from Section 78 A (2) of the Environmental Protection Act 1990.

**Contamination** - The addition or the result of the addition, or presence of a material or materials to, or in, another substance to such a degree as to render it unfit for its intended purpose.

**Cumulative Effects** - The summation of effects that result from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions

**Cumulative Effects Assessment** - The assessment of the impact on the environment, which results from the incremental impact of an action when added to other past, present or reasonably foreseeable actions

**Decibels (dB)** - The unit of sound level.

**Department for the Environment, Food and Rural Affairs (DEFRA)** - UK Government department with responsibilities for EIA of uncultivated land and semi-natural areas in England and Wales

**Dioxins** - A family of chlorinated organic compounds.

**Drainage** - The rapidity and extent of the removal of water from the soil by surface run off and by down-draw flow through the soil. Also, the natural and artificial means for improving this removal by a system of surface and subsurface conduits.

**Dust** - Generic term used to describe larger non-respirable airborne particulates (typically those which are deposited rapidly and associated with soiling/marketing of property, cars, vegetation etc.)

**EA** - Environment Agency.

**Effect** - The likely consequence of the project impacts on environmental receptors and resources.

**EIA** - Environmental Impact Assessment

**EIA Regulations** - Collective name for the various statutory instruments through which the EC Council Directive on Environmental Assessment (Directive 85/337/EEC) as amended by Directive 97/11/EC) was implemented

**Energy from Waste** - A waste treatment process involving the combustion of waste. The resulting heat is used to make steam from which electricity is generated and fed into the National Grid. It is also possible to provide District Heating. Significant emission control equipment is provided at such facilities to control pollution.

**Environmental Assessment** - See Environmental Impact Assessment

**Environmental Impact** - An alteration, positive or negative, to some aspect of the environment occurring as a result of a development.

**Environmental Impact Assessment** - The systematic, reproducible and interdisciplinary identification, prediction and evaluation, mitigation and management of impacts from a proposed development and its reasonable alternatives. Sometimes known as environmental assessment.

**EPR - Environmental Permitting Regulations** – the regulations through which the Environmental Permitting regime is implemented. EPR is also the mechanism by which the Waste Incineration Directive (WID) is implemented.

**Environmental Permit (EP)** - A permit to be obtained from the Environment Agency in advance of operation under the EPR.

**Environmental Statement** - Document in which the results of an EIA are presented to decision-makers and the public.

**ES** - Environmental Statement

**EFW** - Energy from Waste Facility. A type of thermal treatment process providing added benefits by recovering the heat released from the combustion of the waste and using it to generate electricity and/or to provide steam or hot water.

**FGT** - Flue Gas Treatment

**Flue Gas** - Gas by-products of the combustion process whose constituents may be polluting.

**Furan** - Commonly one of a range of polychlorinated dibenzofurans that are produced as contaminants from the incomplete incineration of chlorinated hydrocarbons.

**Furnace** - Apparatus with combustion chamber for subjecting waste materials to intense heat.

**Groundwater** - Water flowing through, or contained beneath, the ground surface.

**Habitat** - The natural environment of animals or plants.

**Heavy Goods Vehicle (HGV)** - Includes all rigid and articulated vehicles over 5 tonnes gross vehicle weight, with two or more axles. Includes tractors (without trailers), road rollers, box vans, and similar large vans. DTLR: 'Transport Statistics'. GB, 2001.

**Household Waste** - Waste from domestic premises, caravans, residential homes, educational establishments or premises forming a part of a hospital or nursing homes (Section 75 (5) of the Environmental Protection Act 1990). This includes all waste arising within a Waste Collection Authority, collected waste, waste delivered to Civic Amenity Sites, and waste brought to recycling centres.

**HRC** - Household Recycling Centre. Site utilised for the disposal of recyclable material and household bulk items requiring disposal.

**HSE** - Health and Safety Executive

**Hydrology** - The study of the distribution and conservation of water.

**Impacts** - Change in the baseline attributable to the implementation of the proposals

**Incineration** - Chemical oxidation at high temperatures where organic material is converted into heat energy, flue gas or ash.

**IWMF** - Integrated Waste Management Facility (at Battlefield comprising a WTS and an HRC).

**LA90** - This is the noise level that is exceeded for 90% of the measurement period and gives an indication of the noise level during quieter periods. It is often referred to as the background noise level and is used in the assessment of disturbance from industrial noise

**Landfill Allowance Trading Scheme (LATS)** - In order to ensure that the UK meets its obligations under the Landfill Directive, the Waste and Emissions Trading Act (WET Act) requires an allowance to be set for the tonnage of biodegradable municipal waste that can be land filled in the UK. This allowance scheme is called the Landfill Allowance Trading Scheme. Landfill allowances are allocated to each authority to enable England to meet its targets. These allowances set out limits on the tonnage of biodegradable municipal waste that local authorities can send to landfill and the allowances can be banked, borrowed or traded.

**Made Ground** - Any ground, which has been disturbed by human operations and no longer, has a natural character. It often contains construction debris or has been hard-surfaced.

**Mitigation** - Measures, including any process, activity or design to avoid, reduce, remedy or compensate for adverse effects of a development project.

**MSW** - Municipal solid waste (MSW): household waste and any commercial or industrial waste collected by the Waste Collection Authority or its agents. It includes collected household waste, street cleaning and litter, bulky household and civic amenity waste, commercial and industrial waste collected by or on behalf of the authority under Section 45 of the Environmental Protection Act 1990, waste from council premises, parks and gardens waste and fly-tipping clearance.

**Municipal waste** - Waste, including household, commercial, fly-tipping, street sweeping and any other that is controlled by the local authority. See MSW

**MW - Megawatt** – a unit of electric power that equals 1,000,000 watts.

**Nitrogen dioxide (NO<sub>2</sub>)** - Reddish brown gas (in high concentrations), respiratory irritant and precursor to photochemical processes which produce other pollutants and photochemical smog and contribute to global warming.

**Noise** - Noise is the term often used to describe unwanted sound, i.e. sound that annoys, interferes with activities or damages hearing. It is also used to describe a combination of sounds which vary randomly with time and which cover a wide range of frequencies.

**Non Technical Summary (NTS)** - Information for the non-specialist reader to enable them to understand the main environmental impacts of the proposal without reference to the main environmental statement

**Normal Operation** - Operation within specified operating conditions and limits.

**NOx** - Collective expression to describe oxides of nitrogen (Nitrogen dioxide (NO<sub>2</sub>), nitrogen oxide (NO), nitrous oxides (N<sub>2</sub>O)).

**PAHs** - Polynuclear Aromatic Hydrocarbons; any hydrocarbon compound containing two or more fused aromatic rings.

**Particulates** - Fine, solid particles that remain individually dispersed in gases and stack emissions.

**Photomontage** - The superimposing of an image onto a photograph for the purpose of creating a realistic representation of proposed or potential changes to a view.

**PM<sub>2.5</sub>** - Particulate matter with a diameter of 2.5 microns (µm) or less (microns are also referred to as micrometers or 10<sup>-6</sup> of a metre).

**PM<sub>10</sub>** - Particulate matter with a diameter of 10 microns (µm) or less (microns are also referred to as micrometers or 10<sup>-6</sup> of a metre).

**RCV** - Refuse collection vehicle.

**Ramsar sites** - Wetlands of international importance designated under the Ramsar Convention. The Meres and Mosses Ramsar comprises a group of wetlands in North Shropshire and Cheshire, including Hencott Pool.

**Receptor** - A component of the natural or man-made environment, such as water or a building, which is affected by an impact.

**Residual effects** - Effects remaining after mitigation measures have been implemented

**Residual impacts** - Those impacts that would remain after the effect of mitigation measures have been accounted for.

**Residual Waste** - Residual wastes are those remaining following extraction of materials for reuse or recycling either at source by householders (as part of separate kerbside collections organised by the Waste Collection Authorities), or following segregation or treatment at other facilities.

**Scoping** - An early stage in the environmental impact assessment process where the significance of environmental issues and scope of the environmental studies are determined.

**Sensitivity** - To determine the significance of an environmental effect, consideration is given to the sensitivity of the receptor potentially affected by the change. The sensitivity of the receptor is defined in environmental chapters of the ES and is graded as high, medium, low or negligible.

**Shropshire** - The area administered by Shropshire Council. Not equivalent to the historic county of Shropshire as it excludes the Unitary Authority of Telford and Wrekin.

**Shropshire Waste Partnership (SWP)** - The body responsible for collecting and disposing of household waste on behalf of Shropshire Council.

**Source Protection Zone** - Zone around a public groundwater abstraction borehole in which there are restrictions on the type of activities and development permitted to protect groundwater.

**SO<sub>2</sub> - Sulphur dioxide** – Formed principally through combustion of sulphur bearing fossil fuels.

**SO<sub>x</sub>** - Collective expression to describe oxides of sulphur.

**Special Area of Conservation – (SAC)** - International designation implemented under the Habitats Regulations for the protection of habitats and (non bird) species.

**SSSI - Site of Special Scientific Interest** - A nature conservation notification for sites of importance at the national level.

**SWMP** - Site Waste Management Plan

**Town and Country Planning (Environmental Impact Assessment (England and Wales) Regulations 1999** - These Regulations implement, in England and Wales, Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, amended by the new Towns and Country Planning Regulations 2000 (SI 2000/2867).

**tpa** - Tonnes per annum.

**Unitary Authority** - A single tier Local Authority responsible for most local government functions within its area. Typically has the responsibilities of both the Waste Disposal and Waste Collection Authority and can determine planning applications relating to waste.

**Veolia** - Veolia Environmental Services Group

**VESS** - Veolia ES Shropshire Ltd.

**Waste** - Any substance or object the producer or person in possession of it discards, or intends, or is required to discard.

**WCA** - Waste Collection Authority

**WLP** - Shropshire Waste Local Plan

**WID** - Waste Incineration Directive. EC Directive 2000/76/EC of 4 December 2000.

**WPA** - Waste Planning Authority

**WTS** - Waste Transfer Station, facility where bulking operations of residual waste are undertaken prior to transportation to final destination.

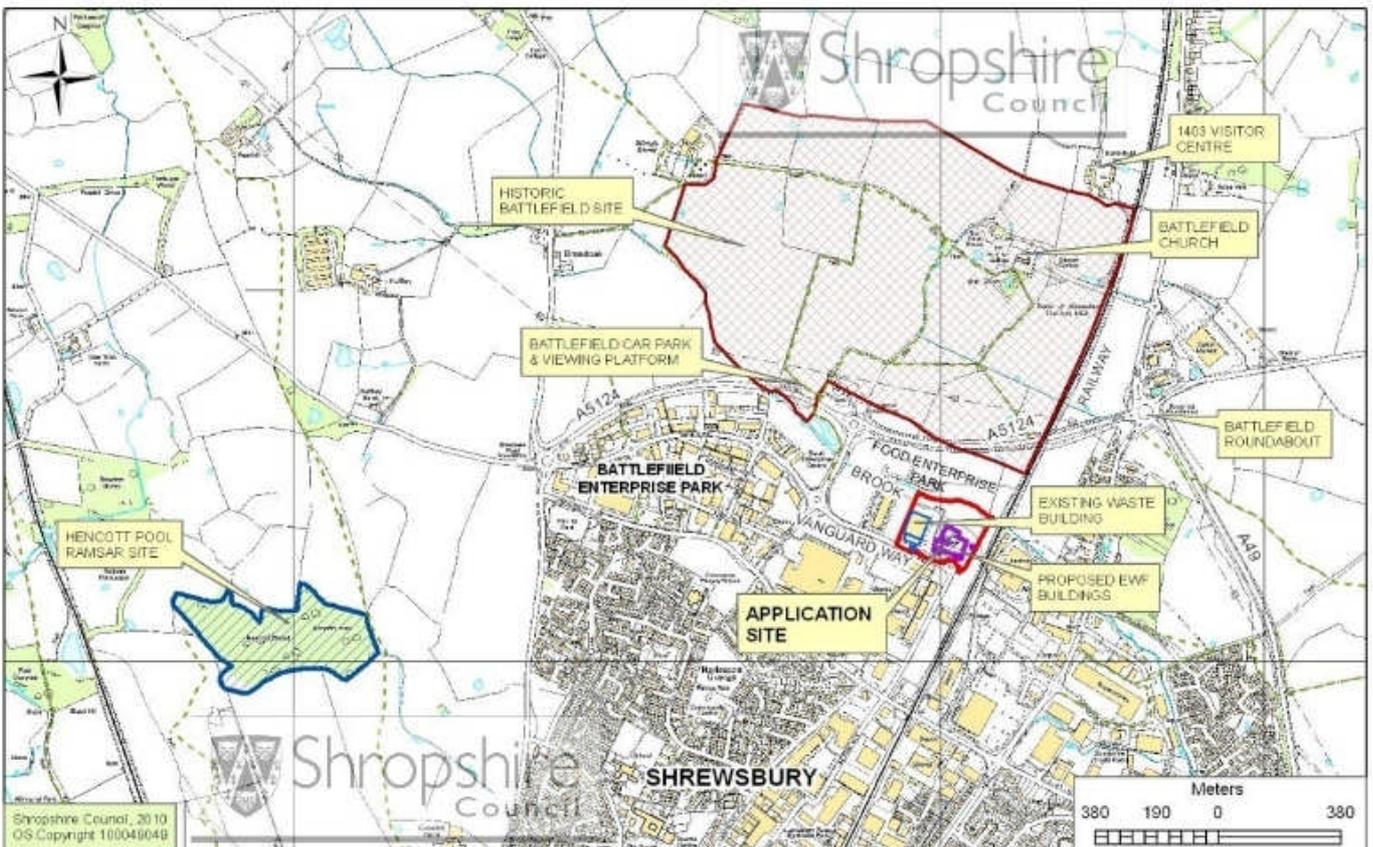
# APPENDIX 4 - LOCATION PLANS



**PROPOSED ENERGY FROM WASTE FACILITY  
BATTLEFIELD ENTERPRISE PARK, SHREWSBURY  
VEOLIA ENVIRONMENTAL SERVICES SHROPSHIRE LTD**

SCALE 1:5,000

Tom McCabe, Corporate Director  
Economy & Environment  
The Shirehall, Abbey Foregate  
Shrewsbury, SY2 8ND



**PROPOSED ENERGY FROM WASTE FACILITY, VANGUARD WAY, BATTLEFIELD, SHREWSBURY  
SITE CONTEXT**

1:15,000

Tom McCabe, Corporate Director  
Development Services  
The Shirehall, Abbey Foregate  
Shrewsbury, SY2 8ND