



**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**

at

Vanguard Way, Battlefield Enterprise Park, Shrewsbury

Environmental Statement: Non-technical Summary

on behalf of

Veolia ES Shropshire Limited

Scott Wilson Ltd

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Revision Schedule

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1 INTRODUCTION AND BACKGROUND

1.1 Introduction

This document is a non-technical summary of the Environmental Statement (ES) that accompanies an application for planning permission submitted by Veolia ES Shropshire Ltd (VESS), part of the Veolia Environmental Services Group (Veolia). The application relates to the development of an Energy from Waste Facility (EFW) for the combustion of residual municipal and similar wastes and the erection of ancillary buildings and plant and an extension to the existing Household Recycling Centre (HRC) on a site at Vanguard Way, Battlefield Enterprise Park, Shrewsbury, Shropshire (see Figure 3.1).

A planning application for the proposed development has been submitted to Shropshire County Council (SCC).

As part of the preparation of the planning application, an assessment has been made of the impact that the development as a whole might have on the environment (an Environmental Impact Assessment, EIA). The findings of the assessment have been used to develop the proposals and an Environmental Statement (ES) summarising the results of the EIA has been submitted in support of the planning application.

Planning applications for waste management related developments are determined by the County Council. Therefore, although the proposed development lies within Shrewsbury and Atcham Borough Council's (SABC) administrative area, SCC as the Waste Planning Authority will determine this application whilst SABC will be a consultee.

The planning application and the Environmental Statement can be inspected at the offices of Shropshire County Council: Shirehall, Abbey Foregate, Shrewsbury, SY2 6ND, as well as at the following locations:

- the offices of Veolia ES Shropshire Ltd: Bolingbroke House, Battlefield Enterprise Park, Vanguard Way, Shrewsbury SY1 3TG; and
- the offices of Shrewsbury and Atcham Borough Council: The Guildhall, Frankwell Quay, Shrewsbury, SY3 8HQ.

Electronic copies of the ES are available free of charge by writing to Veolia ES Shropshire Ltd, Bolingbroke House, Battlefield Enterprise Park, Vanguard Way, Shrewsbury SY1 3TG. Hard copies are available from the same address at a cost to be advised. Copies of this non-technical summary can be obtained, free of charge from the same address.

Details of the planning application, Environmental Statement and Non-Technical Summary can also be viewed on-line at www.veoliaenvironmentalservices.co.uk/shropshire.

1.2 Background

On 1st October 2007, VESS commenced delivery of services under the Integrated Waste Disposal Contract on behalf of the Shropshire Waste Partnership (SWP). The services to be provided by the Company under this contract include reducing, collecting, recycling, recovering and disposing of municipal waste on behalf of the councils in the Shropshire Waste Partnership area. The contract term is 27 years.

The most important reasons for the letting of the contract is the wish of the Shropshire Waste Partnership (SWP) to improve the performance of the service provided in terms of sustainable waste management and to avoid the penalties that would be payable under Landfill Allowance Trading Scheme (LATS) and the increasing cost of Landfill Tax.

Under the new contract, VESS plans to invest in excess of £100 million in new and improved infrastructure designed to provide a long term, sustainable municipal waste management service to Shropshire residents.

The proposed EWF is an essential component within the overall waste management solution and is necessary if Shropshire Waste Partnership is to achieve compliance with international, national and local policies that require increased levels of recycling and diversion of MSW from landfill as part of their adopted strategy.

2 THE PROPOSED DEVELOPMENT

2.1 The Site and its Setting

The EFW Development Site (the Site)

The site is located on vacant land adjacent to the existing IWMF within Battlefield Industrial Estate (Figure 3.1) on the northern edge of Shrewsbury.

The Site occupies an area of 4.3 hectares and comprises a vacant plot together with the existing IWMF, comprising a Household Recycling Centre (HRC) and Waste Transfer Station (WTS), within Battlefield Enterprise Park.

The Site slopes gently northwards towards the Battlefield Brook, which defines the northern site boundary. The Shrewsbury – Crewe railway passes approximately 25 metres to the east of the Site. Battlefield Brook flows to the east, via a culvert, under the railway. The Site is devoid of mature trees and hedges, with the exception of those alongside Battlefield Brook (Figures 3.3, 3.4 and 3.5).

The site is not covered by any nationally or regionally important designations such as National Parks, Sites of Special Scientific Interest (SSSI) or Areas of Outstanding Natural Beauty. It does not contain any listed buildings or trees with protection orders.

The western part of the Site is defined by the existing IWMF developed in 2004 by Shropshire County Council as Phase 1 of the Battlefield waste development site.

Within the IWMF, the HRC provides a facility for the public to deposit household waste and incorporates areas for the segregation of various recyclable materials. The IWMF also includes a WTS which provides a facility for the bulking and onward transportation of recyclables collected by (or on behalf of) the Waste Collection Authorities (WCAs) through the kerbside collection schemes in Shrewsbury & Atcham Borough and parts of North Shropshire District as well as for the onward transfer of residual wastes arising from the HRC and the WCAs. Currently the latter is bulked-up for onward transportation to landfill disposal. To south of the IWMF is the existing administration building. This has car parking for 14 cars including three disabled spaces.

Surrounding Area

Land between the Site and Battlefield Link Road and between the Site and Battlefield Way has the benefit of planning permission for the development of a Food Enterprise Centre and is currently undergoing site preparation works and development. A number of other industrial units in the vicinity of the site and south of Vanguard Way are under construction as part of the expanding Battlefield Enterprise Park development.

The nearest residential properties to the Site are in Battlefield, approximately 300 metres to the north east. These properties are screened from the Site by the railway embankment and associated trees. Residential properties at Harlescott Grange are located approximately 460 metres to the south west. Nearby industrial units to the east of the railway include ABP located 120 metres to the east. Battlefield Church and the Field House, a residential property, are located approximately 800 m to the north of the Site beyond the Battlefield Link Road (A5124).

Several public footpaths and bridleways cross the open countryside to the north of the Site. The nearest public right of way is located approximately 370m to the north-west of the Site.

The site is located within a 700 metre buffer zone imposed by the Health and Safety Executive around the site operated by Firmin Coates Ltd for the warehousing and distribution of packaged chemicals. However, the HSE (Factories Inspectorate) was consulted on the allocation of the site within the Shropshire Waste Local Plan and on the Phase 1 planning application. In both cases the location of the Phase 1 site within the buffer zone was not a judged to be a factor which warranted refusal of planning permission for the development.

Site History

Available historical mapping indicates that the area occupied by the proposed development was in continuous agricultural use until the development of the IWMF in 2004.

2.2 The Proposed Development

Summary of Development

The layout of the EWF development is shown on Drawings 101-0 and 110-0. Computer generated 3-D images of the proposed development are shown on Figure 4.3.

In summary, proposed the development will comprise:

- an Energy from Waste Facility to process 90,000 tonnes of residual municipal waste per annum;
- ancillary development including:
 - administration block and offices;
 - two weighbridges and associated infrastructure;
 - modifications to the existing internal road system and staff and visitor parking for 22 cars including 2 disabled parking spaces;
 - fuelling area and vehicle washing facilities;
 - site landscaping
 - site lighting
- construction of an extension to the adjacent HRC.

The EWF will utilise proven, flexible and reliable small scale mass burn moving grate technology and has been designed to process a nominal 90,000 tonnes of residual municipal waste per annum, via a single line process, having a capacity of 12 tonnes per hour (tph) at 9200kJ kg^{-1} and assuming an average 85% availability as a result of planned and unplanned downtime over the life of the plant.

The EWF will include a steam-driven turbine generator creating approximately 8 MW of electrical power for use by the plant and export to the local distribution network. There will also be provision for steam extracted to supply heat to suitable external users, subject to demand and practicality. Figure 4.4 summarises the main inputs and outputs of the EWF.

The EWF will be housed within a purpose built structure. A single slender chimney, 65 m in height, will be located towards the western end of the building. The main EWF building will include a control room and viewing gallery located in a glazed steel framed and concrete mezzanine structure supported on steel columns.

The extension to the HRC will increase the capacity of the HRC facility and the range of wastes that can be segregated and separate the public access to the HRC from the waste collection vehicle traffic to the WTS. This will include:

- 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.

Design and Landscaping

The design of the proposed development has been led by S'pace S.A. – an internationally renowned architectural practice based in Paris. S'pace has worked iteratively with the outputs of the ES prepared by Scott Wilson and pre-application consultation responses.

S'pace has worldwide experience of designing EWFs and is responsible for the design of the EWFs developed by Veolia at Marchwood and Chineham (Hampshire), Portsmouth and as proposed by the Company at Newhaven (East Sussex) and Rufford (Nottinghamshire). Examples of S'pace's work have featured in the guide to 'Designing Waste Facilities' published by Defra last year (2008).

The design concept developed by S'pace aims to produce a high quality facility that optimises the balance to be made between technical, economic, social and aesthetic considerations and to ensure successful integration of the development into its surroundings and the existing Phase 1 facility.

The choice of materials, shapes and proportions is guided by the principle that the optimum balance is to be struck between cost and technical criteria on the one hand and the aim to achieve elegance, efficiency, innovation, durability, sustainability and flexibility on the other.

The latter stages of the design process have also been informed by the principles set out in 'Designing Waste Facilities' guidance document published by Defra in October 2008.

Computer generated 3-D images of the proposed development are shown on Figure 4.3.

The proposed development will involve the loss of 1.7 hectares of disused agricultural land. Native structure and tree planting will be provided on the northern side of the Site to provide visual screening and help to integrate the development both with the surroundings and with the natural vegetation along the Battlefield Brook (including the nature corridor which forms part of the development proposals for the land on

the northern side of the brook). Native and semi-native ornamental planting, together with a grassed area will be provided around the entrance to the EWF to enhance the appearance of the facility for the benefit of visitors. An indicative landscape masterplan is shown on Figure 4.1.

Access

Access to the Site will be from the existing roundabout on Vanguard Way (Drawing 101-0). This in turn links to the local highway network comprising the A5124 Battlefield Link Road to the north, Battlefield Way to the west and Harlescott Lane/Brixton Way (via the Brixton Way Link) to the south.

EWF Operations

Permission is sought to enable the facility to receive waste 24 hours a day, 7 days per week. During outages and planned maintenance (taken to be 15% of total working hours), direct delivered waste will continue to be delivered and stored within the facility pending the resumption of operations.

The 24-hour arrangements are required to provide operational flexibility for the waste disposal and waste collection authorities, including for the receipt of wastes arising from Street Cleaning operations that may be undertaken at night on behalf of the SWP.

The incoming waste will be stored in the waste bunker to supply the furnace during the night and over the weekend.

However, associated HGV traffic will generally be confined to the same hours as are currently approved for the adjacent HRC, however HGV vehicles will also require access and egress outside these hours in accordance with operational needs.

The hours of operation at the IWMF will remain as currently approved.

Occasional deliveries and/or collections may take place outside of these hours to avoid peak hour traffic flows and to prevent waste being stored within Refuse Collection Vehicles (RCVs) over a night, weekend or Bank holiday period, or for other operational reasons.

A flow diagram of the EWF process is provided in Figure 4.5. The EWF process equipment will be entirely enclosed within the new building. After being weighed, waste delivery vehicles will proceed to the enclosed tipping hall where they will discharge their loads into the waste bunker. A grab crane will then feed the waste into a feed hopper which will discharge the waste at a controlled rate into the furnace. Some of these materials may require shredding or other mechanical

treatment. Wastes will be burnt on an inclined moving grate, which will mix them to ensure optimum combustion.

An adequate air supply will be maintained through injection of air into the grate and the combustion of the wastes. The furnace will be designed to ensure a minimum flue gas temperature of 850°C for two seconds to ensure the destruction of dioxins, furans, PAHs (polycyclic aromatic hydrocarbons) and other volatile matter.

Hot flue gases from the furnace contain considerable amounts of energy which will be converted to high pressure superheated steam through a series of heat exchangers. The steam from the boiler will then feed a steam turbine, which will generate electricity. The electricity will be provided to the public supply grid via an 11/33kV connection. The connection to the grid will be via underground cables. Exhaust steam from the turbine will be condensed by air cooled condensers and then returned to the boiler.

Within the furnace, Nitrogen Oxide (NO_x) abatement takes place (by the careful control of combustion air and the use of a process in which a urea-based reagent is injected into the high temperature region of the boiler to further reduce the amount of NO_x in the gas stream.). Upon leaving the boiler, the combustion gases are further cleaned before they are released to the atmosphere. This will be achieved by means of a gas scrubbing system and fabric filters. A fan will draw flue gas through the boiler and flue gas cleaning system and discharge the cleaned flue gas up the chimney. The flue gas treatment will be designed to comply with the exacting standards of the EC Directive on Waste Incineration (2000/76/EC), which will be enforced by the Environment Agency, through conditions attached to the facility's Environmental Permit (EP).

The process stream will have a single flue chimney with a proposed height of 65m. The height has been determined through extensive computer modelling of emissions and evaluation of the resulting dispersion plumes.

The main residue produced by the EWF will be bottom ash (the non-combustible elements remaining after the process). The output will be approximately 25% of the input tonnage of household waste by weight. It is predicted that, excluding recovered ferrous metal, (approximately 3,600 tonnes of which will be magnetically recovered at the EWF for recycling); approximately 22,500 tonnes of bottom ash will be produced each year. Where practical, this will be taken to a facility, to be determined, where it will be processed to produce secondary aggregates for use in construction and road building projects. Indeed, Veolia are currently working in partnership with secondary mineral processors to develop a number of strategic outlets around the UK. Any unrecycled bottom ash would be sent to landfill. The flue gas treatment (FGT) residues (approximately 3,600 tonnes per year) containing the dry reaction products and fine ash collected by the flue gas treatment process will be transferred to sealed tankers and transported off site for beneficial reuse in chemical processes or for specialist treatment prior to disposal.

Construction

Timescales

Subject to planning approval, release of pre-commencement conditions and contractor mobilisation, it is estimated that the development timescales would likely to be as follows:

- Commence Construction: late 2009/early 2010
- Construction Completion: late 2012
- Commissioning: early 2013
- Run-in period: early 2013.

There are two main periods of construction works which will overlap to some degree. These are the civil engineering works associated with the plant construction and the process work involved in the mechanical and electrical equipment installation, fit out and commissioning of the plant. The estimated peak period of overlap will be for some three months in late 2011/early 2012.

In practice, some waste will be received and processed during the commissioning period on an intermittent basis to allow testing, prior to handover. That waste will however, comprise materials currently being delivered to the existing Waste Transfer Station for onward disposal to landfill under pre-EWF arrangements. For the purpose of the EIA, early 2013 has been assumed as the effective commencement date for waste processing through the plant..

Hours

Construction operations will generally take place between the following hours:

- 07:00 - 19:00 Monday to Friday
- 07:00 - 13:00 Saturday

No construction works will take place on Sundays or Public Holidays.

However, it is envisaged that non-intrusive activities (such as electrical installations, pipe testing and similar activities) would be undertaken outside of these hours in order to minimise overall construction time. HGV movements associated with such activities would be insignificant.

Any intrusive work outside of these hours would be with the prior agreement of the Planning Authority, except in the case of related to emergency and health and safety.

Access

Site access during construction works will be via the eastern limb of the roundabout on Vanguard Way, although specific road authorisation and access for cranes or deliveries may be required by arrangement.

3 STAKEHOLDER ENGAGEMENT, SCOPING AND METHODOLOGY

3.1 Stakeholder Engagement

VESS has built on and dovetailed its activities with the public consultation and communications work already carried out by the Shropshire Waste Partnership (more latterly in conjunction with VESS) to explain the waste management issues faced within the area and the strategy for addressing them.

A general waste educational presentation was produced about the integrated contract and presented to the public at a number of towns within Shropshire via a road show during January 2008. This covered the aims of the contract – to reduce waste, increase recycling, treat waste and the proposed new waste handling facilities. VESS staff were present to answer any questions on strategy and explain the case for an EWF.

The following communications tools have also been employed to keep members of the public up to date with its activities and operations.

- the VESS website - www.veoliaenvironmentalservices.co.uk/shropshire;
- literature;
- presentations, talks, exhibitions and visits; and
- press releases

A public exhibition/information display was held in March 2008 over two days in the local area. A series of adverts were placed in the local press leading up to the exhibition for people to come along and find out more about waste management in Shropshire and specifically about VESS's proposals for an EWF at the Battlefield Enterprise Park site. The purpose was for people to find out at an early stage what sort of facility this would be and why it was needed and how it would be part of the strategy to manage municipal waste in the area more sustainably and reduce landfill to the bare minimum. It enabled local residents to ask VESS staff directly any questions and to discuss any issues they might have.

Those who attended the exhibition were also invited to join a Community Liaison Group. The CLG was formed to focus specifically on the proposed development at Battlefield Enterprise Park site, provide information and establish a dialogue with local people while plans were being developed. Meetings of the CLG started in April 2008 and VESS has provided members of the CLG with the opportunity to feed in local

views and concerns - enabling these to be carefully considered and, where practical, taken on board.

The CLG has been specifically established with the focus on the local community rather than the wider area. It comprises 16 people. Individuals were invited to join the Group as far as possible to represent the different segments of local communities around the site and to include council and environmental interests as well as local residents. Each meeting of the CLG is independently chaired, held locally and follows a set agenda.

In addition, the CLG visited Chineham EWF, near Basingstoke, operated by Veolia as part of its Integrated Waste Management project for the management of Hampshire's municipal waste. This site was selected as it is of comparable size to that being proposed to serve Shropshire.

During the period up to December 2008, VESS had responded in writing to over 150 detailed questions raised during the pre-application and community group work and many more verbal ones at various times and in particular at the two exhibitions.

After the planning application has been submitted VESS will provide further measures to support the communication process by providing a broad range of ways for local people to find out more.

3.2 Scope of the Environmental Statement

The ES has been prepared by Scott Wilson on behalf of VESS, in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended).

The purpose of the ES is to ensure that:

- relevant environmental issues are assessed appropriately;
- potential environmental impacts, associated with either the construction and operational phases of the proposed scheme, are identified, together with appropriate mitigation measures;
- interested parties are given the opportunity to consider and comment on issues arising.

The ES seeks to present the scheme proposals and the results of specialist assessments in a clear and unbiased manner and has been produced to accompany the planning application.

Preliminary details of the proposals were sent to Shropshire County Council together with an Environmental Scoping Report and a request for a Scoping Opinion/advice on

the content of the Scoping Report and any further issues needing to be considered within the Environmental Statement to be submitted by VESS. Based on the advice (or "Scoping Opinion") received from the council (and consultees) the key potential environmental and related impacts to be assessed in detail in connection with the proposal are:

- traffic;
- noise;
- air quality;
- landscape and visual effects;
- natural heritage;
- hydrology and drainage; and
- community and social impacts.

In addition, the following issues have also been considered within the Environmental Statement: land-use, ground contamination, waste management and cumulative and combined impacts.

3.3 Methodology

Independent specialist consultants have assessed each of the environmental issues identified. These specialist assessments generally involve site visit/s; the collection of data about the site and its surroundings; identification of the likely significant effects of the development; and the making of recommendations on how these effects could be avoided or reduced.

The assessment of each environmental topic forms a separate chapter of the ES. For each topic, the methodology adopted has been set out together with an evaluation of existing (baseline) environmental conditions. The likely effects of the project have been identified together with an assessment of their significance.

The methods for predicting the nature and magnitude of any potential environmental impacts vary according to the subject area. Quantitative methods of assessment can predict values that can be compared against published thresholds and indicative criteria in Government guidance and standards. It is not always possible though to ascribe values to environmental assessments and thus qualitative assessments are used: such assessments rely on previous experience and professional judgement. The methodologies used for assessing each topic area are described within the individual chapters.

The significance of an effect has been assessed taking into account factors such as extent and magnitude of effect, duration and sensitivity of the receiving environment.

Whilst individual environmental impacts, such as noise and air quality have been considered in individual Chapters and technical appendices of the environmental statement, there is the potential for one environmental subject area to impact upon another; for instance, increasing the volume of traffic along a stretch of road has implications on the noise climate. Such combined effects have been addressed in each of the respective Chapters and technical appendices within the Environmental Statement.

The effects of the proposals together with other developments planned in the area have also been identified. Information on these planned developments has been obtained from a number of sources including SABC.

4 ENVIRONMENTAL EFFECTS

4.1 Introduction

The development proposals include a range of measures that have been designed to reduce or prevent significant adverse environmental effects arising (mitigation measures). In some cases these result in improvements in existing environmental conditions. The assessment of effects has taken into account all mitigation measures that form part of the development proposals and to which VESS is committed. These mitigation measures form part of the description of the development provided in the ES and include, for example, landscape planting to provide ecological enhancement.

This section provides a non-technical summary of each of the topics assessed in the EIA in the order in which they appear in the ES.

4.2 Scheme Alternatives Considered

The EIA Regulations 1999 require an ES to include: *“An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.”*

The assessment of alternatives provided in the ES provides an outline of the alternative waste treatment technologies and sites at which they could be developed considered by VESS - together with the reasons for its final choices.

Technologies

A wide range of waste technologies and an option of 'do nothing' have been assessed against a defined set of sustainability criteria following a scoring mechanism. The high-level comparison of different generic technology options confirmed that all of the options are associated with some level of detrimental impact in certain areas (e.g. energy use, residues disposal quantities and economic cost) and that all options also provide the potential for significant potential benefits, particularly in terms of sustainable consumption and production and sustainable communities objectives.

The do-nothing scenario is however not a sustainable option, since it is principally dependent on out of county landfill (a factor which, applies to other solutions which, whilst higher up the waste hierarchy, are heavily dependent on landfill for the disposal of residuals).

The Company's assessment of the advantages and disadvantages of each of the main MSW treatment technology categories is cost constrained, it serves to emphasise that in the case of Shropshire, thermal technologies are the only category which can be

considered as proven and to offer a complete solution for the management of residual waste.

These were the principal reasons for Veolia's choice of EWF as its preferred technology for the management of Shropshire's residual waste. Furthermore, the relatively small throughput capacity of the facility, when coupled with other components of the integrated waste management service being provided by Veolia, are considered to represent a robust, flexible and affordable solution which reduces overall transport movements and exports from the County.

Sites

VESS began its consideration of alternative sites by reviewing the waste transfer and recovery site search and selection exercise undertaken by Shropshire County Council during the course of preparing the Shropshire Waste Local Plan 2002 – 2014 (WLP).

As the exercise undertaken by the County Council was mainly carried out during 2002/03, VESS also took into account:

- the assessment of alternative sites made in the ES that accompanied planning application number MS03/0985/SY (for the IWMF at Battlefield Enterprise Park, Shrewsbury); and
- sites allocated for employment use in the local plans adopted by the planning authorities in Shropshire since 2002/3.

Finally, the Company has also given consideration to the other potential sites suggested during the consultation it undertook in the period leading up to the submission of the application for planning permission (to which this ES relates).

Scott Wilson has tested the appraisal of these sites using a number of selection criteria adopted by VESS and relevant to the development proposed, namely:

- is the site in Shropshire;
- is the site area sufficient (i.e. a minimum net developable area of approximately 1.20ha); and
- is the site in a central location i.e. within approximately 12 km of Shrewsbury.

Following this review, the site at Battlefield Enterprise Park, Shrewsbury is the only one assessed that satisfies both the Company's key selection criteria and the other factors taken into account. Accordingly this site was selected by VESS as its preferred site for the development of an EWF to fulfil the contract awarded to it by the SWP.

4.3 Traffic and Transport

The transport assessment has considered the transportation background to the site as it exists in the present day in terms of trip generation, distribution, routeing and accidents

The proposed facility would create additional HGV movements on the existing highway network. However, given the integration of the proposed EWF with the existing WTS, the increase in HGV numbers would not be material and could not be viewed as creating highway capacity or road safety impacts. Furthermore, should the operator pursue a policy of backloading, then the change in HGV movements would be negligible. There are therefore no grounds on which to object to this proposed development in relation to traffic and transport.

The number of accidents on the local highway network involving HGVs is very small. Furthermore, the road infrastructure around which the development would take place was designed with HGV movements in mind and, as such, there are no obvious geometrical constrictions on the movements of HGVs in the local area. Also, links to the wider strategic network area good.

Notwithstanding this, the Operator would identify a routeing agreement with the local highway and planning authority. Furthermore, the Operator would review its Travel Plan given the additional staff resources that would be employed at the site.

4.4 Noise and Vibration

A survey of background noise levels at specific locations surrounding the proposed site has enabled an understanding of the existing noise climate in the area.

An assessment of noise and vibration has been undertaken with regard to the construction of the proposed Energy from Waste Facility. Results indicate that noise (and vibration) levels will remain below all adopted limits to ensure there is no unacceptable impact on the closest sensitive receptor locations (residential properties).

With regard to operational noise from the proposed facility, noise levels have been calculated at receptor locations in all directions, assuming a noise level of 53 dB L_{Aeq} at the closest point of the assessment boundary. Corresponding predictions of noise levels at the receptor locations indicate noise levels at two out of three locations as within the criteria proposed by SABC. The assessment also presents further evidence to demonstrate there would be negligible noise impact at the third location, to the north.

A qualitative assessment of potential operational vibration, from a review of similar assessments at comparable sites, has supported the assertion that there will be no significant impact at any of the closest receptor locations.

Increases in road traffic flows on surrounding roads will not have a significant effect on environmental noise levels.

4.5 Air Quality

Introduction

The air quality assessment contains an assessment of consequences of releases to atmosphere of prescribed substances or any substances with the potential to cause harm, as a result of the operation of the proposed EWF.

The design and operation of the facility will be governed by the Waste Incineration Directive, which requires adherence to emission limits for a number of pollutants. The assessment focuses on these pollutants.

The air quality assessment also contains:

- an assessment of background air quality;
- an assessment of short term human health effects resulting from emissions of sulphur dioxide, nitrogen dioxide and fine particles; and
- a Human Health Risk Assessment which assesses the impacts of exposure to metals and dioxins.

Baseline Air Quality

An air quality monitoring programme has been established to assess the air quality surrounding the proposed Battlefield EWF site in Shrewsbury

At present, airborne pollutant concentrations in the area of Shrewsbury meet all the Air Quality Strategy objective values, taking into account the exposure of the public. The monitoring results indicate that the pollution climate is typical of similar locations in the UK.

Soil samples taken in the area show the concentrations of heavy metals, dioxins and furans and PCBs to be low and close to levels typical of rural areas in the UK and England. Heavy metal, dioxin and furan and PCB concentrations in air are expected to be typical of rural areas in the UK and England.

Air Quality Assessment

The impact on local air quality as a result of the construction and operation of the EWF has been assessed.

For the construction period, the impacts as a result of the generation of dust was assessed. As there are very few residential properties or receptors within close vicinity to the proposed EWF, thus any nuisance due to dust is deemed insignificant. Furthermore, best practice methods defined previously in the mitigation section will be followed through-out the construction process.

Increases in ground level concentrations of the pollutants specified in the Waste Incineration Directive have been predicted for the operation of the plant, focusing on the pollutant that has potential for the greatest impact, NO₂. The selected chimney height of 65 metres is sufficient to ensure adequate dispersion of pollutants, with regard to existing air quality and to ambient air quality standards.

Emissions that would occur during the operation of the EWF result in small increases in ground level concentrations of pollutants. The total of the additional concentrations to worst case background concentrations results in a combined concentration that is significantly less than the assessment criterion for the protection of human health (see health effects below).

The frequency of occurrence and the lengths of, visible plumes has also been quantified.

The impacts to the designated nature conservation sites in the surrounding region of the proposed EWF location have also been assessed and shown to be acceptable.

Health Effects

The air quality assessment presents the results of a study investigating the human health effects resulting from short-term exposure to some of the substances emitted from the proposed EWF. The health effects associated with emissions of NO₂, SO₂, PM₁₀ and PM_{2.5} from the EWF are shown to be very small, especially in comparison to the health effects associated with the existing exposure to atmospheric pollutants and the existing background events for the effects considered.

Human Health Risk Assessment

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. These substances are those that are 'persistent' in the environment and have several pathways from the point of release to the human receptor.

The assessment of health effects arising from exposure to metals and dioxins indicates that emissions from the EWF do not pose a significant risk to health arising from exposures via either inhalation or the ingestion of foods.

4.6 Landscape and Visual Effects

The baseline landscape and visual context of the application site has been described by an appropriately qualified and experienced Landscape Architect in relation to a desktop study of published information and via a site survey in accordance with current guidance on landscape and visual assessment. Potential landscape and visual impacts, both adverse and beneficial where appropriate, of the development have been identified.

The assessment of the effects of the EWF development was supplemented and aided by the use of a crane survey and 3D computer modelling of the development proposals allowing an accurate understanding and photomontage representation of the proposed EWF (and ancillary developments) within existing views.

Both the landscape and visual assessments consider the potential effects of the proposed EWF at 3 points in time: during the construction period, in Year 1 and at 15 years. This allows for change to visual amenity and landscape character to be assessed over time.

During the construction period it was assessed that the proposed EWF would have negligible adverse effect on the landscape character of the application site and slight adverse effect on the wider rural landscape. On the day of opening effects were assessed as negligible adverse effect on the landscape character of the application site and slight adverse effect on the wider rural landscape. By year 15, taking mitigation and other factors, such as the likelihood of additional buildings being built and the development of planting elsewhere in the landscape, the proposed EWF would result in negligible adverse effect on the landscape character of the application site and negligible adverse effect on landscape character of the wider landscape.

The visual impact of the proposed EWF development have been described for a series of 17 representative viewpoints, chosen to illustrate the range of viewpoints within the zone of theoretical visibility of the application site. For most locations the proposed EWF would be viewed as an industrial building in an industrial context

The sensitivity of viewpoints ranged from high to low, whilst predicted magnitude of visual impact fell in the range medium to zero. Overall significance of visual impact varied from substantial to none with most locations experiencing maximum impacts during the construction period and particularly the latter stages of the construction period, with impacts declining over the 15 year period as mitigation planting takes effect. For the majority of locations visual impact would be of slight or negligible significance.

4.7 Natural Heritage

The Ecological Impact Assessment 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. However, mitigation is proposed to minimise and, where possible, remove the potential for significant impacts on any of the above from the construction activities associated with the proposed EWF. However, some potential residual impacts remain, although the majority of these are extremely unlikely to occur.

The main potential for a significant residual impact from construction activities relates to badgers, although this is dependent on whether the sett is still active at the time construction commences. 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.

This Ecological Impact Assessment also identifies potential significant impacts from operation of the EWF on surrounding designated sites and vegetation within the Zone of Influence, badger, bats, great crested newt and breeding birds. Again, mitigation is proposed which will minimise any potential for significant impacts on any of the above from the operation of the EWF. The site will be regulated by the Environment Agency under its Environmental Permit which will require the strict control and monitor the emissions from the EWF. As such the risk of significant negative impacts on surrounding sites, vegetation and protected species via increased pollutant levels is extremely low.

4.8 Cultural Heritage

The entire area around the proposed development has been assessed to determine potential impacts on cultural heritage in the local area.

The proposed development has been assessed as having a minor effect on the Battle of Shrewsbury site. Sympathetic planting and screening of the new development will help to mitigate any setting issues. The development has been assessed as having a negligible impact on the historic London & North Western Railway.

4.9 Hydrology and Drainage

The site is located adjacent to Battlefield Brook. There is also a small pond onsite. The geology of the area comprised glacial deposits, including boulder clay overlying Triassic Sherwood Sandstone Group (a Major Aquifer used for public water supply), with alluvial deposits associated with the brook. The groundwater level in the vicinity of the waste bunker is between 14.2 and 15.2 m below ground level. The site is contained within a Total Catchment Zone of public water abstractions situated 2km to the south, and 5km to the southeast.

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 is to be 72.25m AOD, which 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.

The environmental management of the site during construction would ensure that the risk of any potential impacts on water resources will be minimised. In addition the operation on the site under an Environmental Permit would ensure the risks of any potential impacts on water resources during operation will be minimised.

It is considered that the construction and operation of the site would have a negligible impact upon the water quality of the Battlefield Brook and onsite pond, and this would, therefore, result in an effect of negligible significance. It is considered that construction works would have a negligible impact upon the surface water flow in the area. This would result in an effect of negligible significance.

With the mitigation measures included in the Scheme design, this would result in a resultant negligible effect on groundwater quality, groundwater flow and abstractions.

The construction of the site is anticipated to be above the water table, and therefore it is considered to have a negligible impact on groundwater flow and levels, resulting in an effect of negligible significance on ecological receptors dependant on groundwater.

4.10 Community and Social

An assessment of community and social effects has been undertaken. In particular the assessment has reviewed potential impacts on:

- residential amenity;
- local economy and employment;
- lifestyle and recreation;
- property values and inward investment; and
- accidents and hazards.

Although it is recognised that, in certain circumstances, the “perception” of environmental risk by people can be a material consideration, it has not been addressed in the assessment since perception is not readily quantified and it will not become clear if “perceived risk” is an issue in relation to the proposed development until the application for planning permission has been made (and publicised) and people have had opportunity to study the submitted scheme in detail. All other relevant environmental risks and impacts have however been assessed.

In relation to residential amenity there is little opportunity for impacts to arise, other than those already addressed in the ES, under the separate chapters on Noise and Vibration, Air Quality, Traffic, Natural Heritage, Cultural Heritage, Hydrology and Drainage and Landscape and Visual. The site’s EP will contain conditions relating to the management of mud, litter and pests so as to avoid nuisance.

During the construction phase the proposed development is likely to generate significant temporary economic and employment benefits in the locality. Although the scale of these benefits will reduce as the development moves into the operational phase, the permanent jobs to be created can be expected to contribute positively to average wage levels in the area and the diversity of employment base in Shrewsbury and Atcham Borough.

An assessment by land agents Cluttons of actual residential and commercial property transactions in Hampshire (where similar EWF developments had been proposed and developed) demonstrated that there had been no noticeable or lasting adverse affect on the property markets in those locations due to the presence of the EWFs and that all locations had seen continued investment/development in both the residential and commercial sectors in the areas around the EWFs in the periods following the grant of planning permission.

The Environmental Permitting system administered by the Environment Agency will ensure that the proposed development is constructed and operated to meet appropriate UK and EU standards for the protection of the environment and public health.

4.11 Other Issues

Land Use

In summary, the development of the EWF should not cause any significant impacts on surrounding land-uses and is compatible with the site’s selection as being suitable for waste management activities including energy generation in the Waste Local Plan.

Ground Contamination

Site investigations have shown that there is no visual or olfactory evidence of contamination in the ground at the site. Chemical analysis of near surface soil samples taken in 2003 showed that no potential contaminants were present in elevated concentrations.

The potential of historic contamination of the site to cause pollution of air, water and land is therefore not considered to be significant.

Waste Management

Waste management impacts can be assessed qualitatively by considering the nature and quantity of the waste materials that are likely to be generated by the site during construction and operation (paying particular attention to any waste streams that are hazardous) under no-development (baseline conditions) and with development.

Notwithstanding the existing IWMF, without development there will be no waste management issues. With the development, 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. Waste management during site operations will be set out in the Management Plan required under the site's Environmental Permit.

With the preparation and effective implementation of the construction SWMP and the Management Plan under the Environmental Permit there will be no residual effects associated with waste management activities at the site.

Cumulative and Combined Impacts

The assessment of potential cumulative impacts that could arise from the interaction between the construction and operation of the EWF and other significant development projects in the area (both beneficial and adverse) is a requirement of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. However, the Regulations only require the assessment of impacts "which the applicant can, having regard to current knowledge and methods of assessment, reasonably be required to compile".

Cumulative impacts associated with the development have been considered as far as practically possible in the following assessments:

- Traffic;
- Noise (traffic noise);

- Air Quality (traffic);
- Landscape and visual impact (screening effect of development to north of the site);
- Cultural heritage (setting of the Battlefield); and
- Hydrology (allowable run-off rates).

The EIA Regulations also require that interactions between various aspects of impact (combined impacts) should be considered in the assessment. This is accomplished by assessing how a particular type of effect (for example, an increase in noise related to traffic movements) may become a source of impact that results in an effect to a different category of receptor. Assessment of combined impacts is discussed within individual ES Chapters. Examples of such assessments include:

- the potential impacts on air quality associated with changes in vehicle movements;
- the potential changes to the noise environment associated with changes in vehicle movements;
- the potential visibility of the plume from the chimney; and
- the potential effects of deposition on land or water resulting from emissions to air (including the potential accumulation of substances over time) on both human health and ecology.

Interactions between more than one type of impact experienced at a particular receptor (e.g. a receptor of noise and air quality impacts) are managed in the context of residual effects following mitigation. In the case of interactions between noise and air quality, potential impacts could be experienced simultaneously or intermittently. There is 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 operation to prevent the individual impacts themselves and prevent such interactions occurring.

5 CONCLUSIONS

This non-technical summary has outlined the findings of the EIA of the development proposals contained within the ES that accompanies the planning application for an EWF at Battlefield Enterprise Park, Shrewsbury.

The EIA has considered the likelihood of significant environmental impacts occurring from the development of the Battlefield EWF upon the site itself and its surroundings. The environmental issues assessed in the EIA have been identified through consultation with Shropshire County Council and other organisations.

The ES has undertaken a comprehensive assessment of the environmental implications of the construction and operation of the proposed development. Implementation of the mitigation measures defined will mean that residual effects should be minimised to an acceptable degree.



GLOSSARY

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 plant.
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.

Defra

The Department for the Environment, Food and Rural Affairs.

Department for the Environment, Food and Rural Affairs

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
EWf	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).

L_{A90}

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 covered by concrete or tarmac.

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, beach cleaning 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 (NO₂)

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.
NO_x	Collective expression to describe oxides of nitrogen (Nitrogen dioxide (NO ₂), nitrogen oxide (NO), nitrous oxides (N ₂ 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_{2.5}	Particulate matter with a diameter of 2.5 microns (µm) or less (microns are also referred to as micrometers or 10 ⁻⁶ of a metre).
PM₁₀	Particulate matter with a diameter of 10 microns (µm) or less (microns are also referred to as micrometers or 10 ⁻⁶ of a metre).

RCV	Refuse collection vehicle.
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.
SABC	Shrewsbury and Atcham Borough Council
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 each environmental chapter of the ES and is graded as high, medium, low or negligible.
Shropshire	The area administered by Shropshire County Council. Not equivalent to the historic county of Shropshire as it excludes the Unitary Authority of Telford and Wrekin.

Shropshire Waste Partnership	The body responsible for collecting and disposing of household waste on behalf of the Local Authorities in Shropshire (i.e. excluding Telford & Wrekin 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 reserves.
SO₂	Sulphur dioxide – formed principally through the combustion of sulphur bearing fossil fuels.
SO_x	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
SWP	Shropshire Waste Partnership.
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 type of local authority that has a single tier and is responsible for the majority or all 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.