

**REVISED SUPPORTING
STATEMENT
TO ACCOMPANY
THE
PLANNING APPLICATION
FOR A WASTE TREATMENT AND
RECYCLING FACILITY
AT
STONEY STREET INDUSTRIAL
ESTATE
MADLEY
HEREFORD**



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1. Introduction.

This planning application is submitted by Estech Europe Limited which is based at Beecham Business Park, Northgate, Aldridge, West Midlands, WS9 8TZ.

The application is to develop a waste treatment and recycling facility capable of handling 100,000 tonnes of municipal solid waste per annum.

The application is supported by a full Revised Environmental Impact Assessment, which was undertaken by independent consultants, Enviros who are based at Enviros House, Shrewsbury Business Park, Shrewsbury and which replaces the original Environmental Statement. For further detailed information regarding any aspects contained within this summary, reference should be made to the Revised Environmental Statement.

In addition to the Revised Environmental Statement, other documents are also relevant to this application. These include the application form and certificates, Appendices to the Revised Environmental Statement, a revised non-technical summary, a unilateral undertaking and certain correspondence clarifying additional issues raised. In respect to the last point, four items of the correspondence are included in the appendices to this statement referring to the scaling of emissions, DSTL response regarding land quality, additional information regarding air quality and the radiological survey.

2. The Applicant.

Estech Europe Limited was formed in June 2001 and has been specifically established to market, develop and operate a system known as the Fibrecycle™ Process. This system has the capability of treating and recycling waste materials, particularly municipal solid waste, and has the potential to recycle up to 80% of the waste materials accepted.

The Company's shareholders have extensive experience in the waste management and engineering industries and also have the financial strength to construct and operate the treatment system which is the subject of this application.

The individual members of the management team also have extensive experience in the waste management and engineering industries and a proven track record for delivering major new projects.

3. The Treatment Process.

The Fibrecycle™ process is a proven method of treatment and recycling for mixed or pre-sorted municipal solid waste (MSW) by means of saturated steam at about 160° Centigrade at low pressure in a rotating autoclave system with very low emissions. After treatment, the wastes have been totally sanitised and all the pathogens neutralised. The volume of the waste is reduced by a nominal 60%. The processed waste is then treated by a series of screens and recovery systems, e.g. debris roll screen, overband magnet, eddy current separator and air classifier, to achieve secondary recycling and separation of the products.



The technology was initially developed in the USA in the mid-1990s by The Slane Company and has been further developed in the UK over the last three years with a Proof of Concept plant in Sheffield, a commercial plant in South Wales and a 5,000 tpa mobile demonstration plant.

The Fibrecycle™ process separates the MSW input into three parts:

- Sanitised products such as ferrous metals, aluminium and mixed plastics for recycling (~20%).
- A homogenous fibre comprising the putrescible, cellulose and lignin elements of the waste stream (>60%).
- Treated and stabilised residual waste for landfill (<20%).

The metals and plastic recyclates would add to Herefordshire's overall recycling achievements. These would find a ready market because of the clean condition of the products from the Fibrecycle™ process. Less than 20% of the treated waste would go to landfill as a sanitised material which would immediately meet the biodegradable diversion targets of the EU Landfill Directive. We would envisage a process of Continuous Improvement to reduce the proportion of the wastes sent to landfill. As new technologies for separating the residue wastes to be landfilled become available, we would envisage the landfill proportion reducing to less than 10%.

After treatment, the wastes have been totally sanitised and all the pathogens neutralised. Our consultant's consideration of the process has led them to the conclusion that the proposed waste treatment would, to all intents and purposes, sterilise the waste and kill off virtually all micro-organisms such as bacteria, fungi, protozoa and viruses. The process would also produce a highly significant attenuation of the BSE and other prions by a factor expected to be of at least 500. The removal of any concerns on micro-biological issues is a positive benefit for the handling and re-use of the fibre.

It will be noted that the Fibrecycle™ process operates with or without doorstep recycling. It complements doorstep recycling initiatives in areas of low householder participation rates.

In the development of our technology we have maintained a close liaison with the waste regulation officers of the Environment Agency. Our discussions have included the regime under which our process, which we believe is best described as waste treatment and recycling, would be operated. As a result of these deliberations, the Midlands Region have now confirmed – after due consultation with the Agency's National headquarters at Aztec West, Bristol – that our process would be licensed under the existing waste management licensing regime and not the Pollution Prevention and Control (PPC) permit regulations which cover processes that may be likely to pollute. This has been further confirmed by the fact that a waste management licence for Estech's Fibrecycle™ process at Hartlebury Industrial Estate, Worcestershire should be issued in August/September 2006. In our view, this decision by the Agency confirms our belief that the proposed technology is a relatively benign process with limited emissions and very limited risk of harm to public health or danger to the environment. The Revised Environmental Impact Assessment has



addressed emissions in detail and confirms that emissions will be well within permitted limits.

Since late 2002, Estech Europe has focused its efforts on establishing recycling markets for the organic fibre. Our ultimate aim is to recycle the fibre into products such that 80% of the output from the Fibrecycle™ process facility is recycled. In order to achieve this, a number of markets have been explored. The proposed uses include the fibre being used as:-

- Compost type materials and/or soil enhancers;
- Composite wood replacement products, when used with waste plastics and extruded to make items such as decking, street furniture;
- Building products such as fibre board, kerbstones, slabs, tiles etc when mixed with a resin;
- Other lower grade products which would normally use fibre from, for example, virgin or recovered timber.

As an alternative, although not the intended route for the fibre produced at Stoney Street Industrial estate, fibre can be used as a feedstock for anaerobic digestion or gasification.

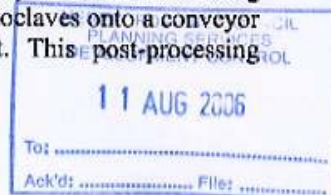
In brief the overall system represents an innovative but proven technology for the treatment of waste, in that:

- Over 60% is recovered as an organic fibre for use as a recyclate,
- Approximately 20% of the material consists of metals and plastics which are recovered for recycling and glass which can be recovered as an aggregate.
- A significant reduction in the need for landfill can be achieved,
- The small proportion of residue that will be sent to landfill will comply with the Landfill Directive as it will have been pre-treated prior to landfill,
- The process can operate unsorted MSW or compliment and enhance segregated collection systems.

The process itself gives rise to very limited emissions. Emissions to air will be the exhaust from the natural gas boiler; this type of gas fired boiler is commonly installed in schools and public buildings. Emissions from the process, including odour and dust, are not considered to be a problem within this type of process and the Revised Environmental Impact assessment has confirmed that emissions are well within permitted limits. The building will incorporate a negative air pressure system to retain any such odours or dust within the building and, in addition, dust capture and odour abatement systems will be installed to ensure that these elements are not released to atmosphere.

4. Operations.

Waste is delivered and unloaded into a dedicated reception area within the building. From this, acceptable waste is conveyed to two feed hoppers prior to being discharged into the two autoclaves. The waste is treated for approximately 30-40 minutes using steam at low pressure. The waste is then emptied from the autoclaves onto a conveyor on which it is transported to post-processing equipment.



equipment includes debris-roll screens, air classifier, overband magnets, and eddy current separators. This separates all the fractions into the materials referred to above.

Additional equipment includes baling plants, containers and mobile plant to load the materials.

All processes and storage will take place within the building.

The operation will treat 100,000 tonnes per annum, five days per week. Whilst the application requests permission to treat and recycle 24 hours per day over six days per week this is to allow for essential maintenance and flexibility for peaks in demand. Treatment and processing will normally be limited to 16 hours per day and the aforementioned five days per week.

Heavy goods vehicle movements will be limited from 0700 to 1800 hours. This includes both deliveries and exports of materials. The anticipated average daily movements of heavy goods vehicles will be 160 (based on 80 delivery and 80 export movements).

The process will provide direct employment for approximately 26 people on a full time basis. Indirect employment will include hauliers and users of the recycling materials and fibre.

The recyclates (plastics and metals) will be baled and then transported to a reprocessor for recycling.

The fibre will be transported to a user of the material and the small amount of residue will be transported to a suitably licensed facility for final disposal.

5. Summary.

The process subject of this application will provide the following benefits:

- A sustainable waste solution which will maximise the opportunity to recycle and re-use waste materials, reducing the need to utilise primary resources.
- Enable the Local Authority to meet its recycling and recovery targets.
- The minimisation of waste disposed of at landfill facilities, thus preserving this finite reserve.
- The residue will have been treated, providing compliance with the Landfill Directive.
- The location of the process will assist in reducing vehicle movements, particularly when markets for recyclates are available locally.
- The process will provide direct employment for approximately 26 local people and indirect employment for others.

