



***PROPOSED ECO PARK AT  
CHARLTON LANE - UPDATE***

**SCC LOCAL COMMITTEE IN  
SPELTHORNE  
*11 July2010***

**KEY ISSUE:**

The purpose of the report is to provide the Local Committee with information regarding the current stage of the proposed Eco Park at Charlton Lane, Shepperton.

**SUMMARY:**

In February 2010 the Surrey County Council Cabinet adopted the World Class Waste Solutions as the Waste Disposal Authority Action Plan. This included the delivery of an Eco Park at Charlton Lane, Shepperton.

This report summarises the wider context of World Class Waste Solutions and proposals for the Eco Park. The report provides the Committee with an update on the proposals. The planning application is due to be submitted formally by October 2010. This report focuses on an update on the planning application and the public consultation that is currently underway.

**OFFICER RECOMMENDATIONS:**

The Committee is asked to agree

- (i) that this report is noted as part of the consultation process**

**(ii) that further presentations will be offered to the committee as required**

**1. INTRODUCTION and BACKGROUND**

1. Before 2009 the strategy for dealing with Surrey's waste included two energy from waste facilities to treat residual waste at a combined capacity of 270,000 tonnes per annum. During 2009, three factors combined to present a major opportunity for the Council to address the imperatives for change:

- There has been a reduction in household waste nationally (5% in last year) but particularly in Surrey (10% in last year)
- There have been significant increases in recycling rates – up 10% in last year with continuing increases projected. Recycling rates went up 5.6% between 2007/8 and 2008/9 (35.3% to 40.9%). Current projections see recycling for Surrey at 50% by August 2010.
- New technologies have emerged which offer the prospect of lower cost and smaller scale operation

2. Since then the financial imperative to divert residual waste from landfill has increased, landfill tax rates will increase from £48 per tonne this year to £80 per tonne in 2014/15. There is also an environmental imperative to reduce greenhouse gases and contribute to carbon reduction and renewable energy targets. Within two years there will only be one remaining landfill facility in Surrey, creating cost, environmental and business continuity risks.

3. In June 2009 the Leader of the Council stated:

*“As a result of the improvements to date, we have an opportunity to remove or reduce our reliance on EFW (energy from waste) Plants in Surrey”*

*“I have asked officers to look at our options as a matter of priority as I want Surrey to set the standards of excellence in this area and I feel confident that this is possible. It is an area of our work in which I think we should be aiming to be world class”*

29<sup>th</sup> June 2009, Leader's report to Cabinet

4. The February 2010 Cabinet report, World Class Waste Solutions (WCWS) sets out the proposed solution. This was approved by the Cabinet and is now being implemented.

**Implementing World Class Waste Solutions**

5. The development of World Class Waste Solutions involves a major waste reduction programme, improvements to Community Recycling Centres around the county, development of bulking and baling facilities at sites around the county to improve dry recycling, development of in vessel composting facility

to treat green waste and the development of an Eco Park. This report only focuses on developments within Spelthorne.

6. The first stage of the development at Charlton Lane has now concluded. This included a redevelopment of the Community Recycling Centre and the implementation of a van permit scheme and a Surrey resident's scheme, which restricts access to the site to only Surrey residents. The result of this has led to reduced vehicle movements of 17%.
7. The second stage of the development will include further improvements to the community recycling centre including the introduction of a Reuse facility. It will also include the construction of an anaerobic digestion facility to treat food waste, the construction of an advanced thermal treatment (batch oxidation system gasification) facility, which will treat residual waste, bulking and baling facility for dry recyclables, local trade and a visitor centre. These facilities are subject to the planning application.
8. The final stage of the development will include the introduction an innovation centre. This is not part of the current planning application.
9. The County Council recently purchased land adjacent to the current facility. The purpose of this land purchase is to enhance the site and provide beneficial landscaping to the Eco Park.
10. The table below summarises the stages of the development. This report provides an update on the current stage, therefore focuses on application development and consultation.

Table 1:

|   |                         |
|---|-------------------------|
| Assessments and application preparation | Feb – Aug 2010          |
| Pre-application consultation            | Feb – Oct 2010          |
| Draft application submitted to CPA      | End Aug 2010            |
| Formal submission of application        | End Oct 2010            |
| Determination of application            | Feb - Apr 2011          |
| Construction phase                      | Aug/Sep 2011 - Nov 2013 |

### **Planning application development update**

11. As part of the planning application SITA (the County Council's contractor who are submitting the application) will complete an Environmental Impact Assessment (EIA), which examines the following areas in relation to the development: traffic; visual impact; ecology and nature; noise and vibration; air quality; hydrology geology and flood risk; archaeology and heritage; socio-economic impact; and cumulative impact. The EIA will consider any impact the development may have on these factors and offer ways to minimise this.
12. The environmental assessments are due to complete in July therefore detailed information will not be able to be shared until after these are

complete. A formal application is then due to be submitted to the Planning Authority for determination in October 2010. Copies of the application will be placed on the public register at Spelthorne Borough Council offices and elsewhere in the local area.

### **Consultation strategy and update**

13. Consultation with key stakeholders commenced immediately after the announcement by Cllr Povey in December. Consultation with residents commenced following the Cabinet decision in February.
14. The first public exhibition to display early, conceptual plans took place on 16 and 17 April. More than 200 people attended following a leaflet drop that targeted 7,000 homes. More than 60 people left comments and questions at the drop in session. SITA are in the process of finalising replies, ready to be sent back to residents. Overall, a wide range of issues were raised, largely concerns regarding increases in traffic, location of the site, plans for adjacent land and the air quality management.
15. There are several rounds of public consultation, the first round in April outlined the conceptual plans. There will be further consultation in the summer and a further exhibition will take place nearer the time the planning application is submitted and will provide details of our firm proposals.
16. In addition to this there will also be a series of technical workshops for a small group of residents who have a technical interest in the project. This will allow for in depth discussion over various aspects of the development, including the technologies chosen, the results of assessments and air quality issues.
17. Local residents have been invited to form a community liaison group, with the first meeting to take place in the last week of June. The purpose of this group is for it to represent the views of the residents in the surrounding area and for residents to raise concerns regarding the development to SITA. This will continue throughout the planning application process and through to development, should planning permission be achieved.
18. To ensure local councillors are informed in the lead up to the submission of the application, there will be an update for councillors and offer a meeting to relevant borough and county councillors to ensure they are fully briefed on the latest plans.
19. SITA and SCC have attended Residents Association meetings, presented the plans and answered resident's questions. Specific questions have been raised following the informal committee meeting.
20. This next section aims to address the specific questions asked.
  - **Why is Charlton Lane the most suitable site for the Eco Park**  
Charlton Lane, Shepperton is located in location that is proximate to the majority of the population of Surrey.

The site currently operates a waste facility, which comprises a community recycling centre (the busiest in the county), a major waste transfer station, and a Materials Recycling Facility. The site currently accepts waste from the surrounding Boroughs and Districts and also handles transfers from other Transfer Stations.

If the Eco Park was located elsewhere there would still be a need to operate the waste transfer station at Charlton Lane but the waste would need to be transferred elsewhere to be dealt with, resulting in a large number of vehicle movements. By basing operations on the Charlton Lane site, an opportunity is provided to reduce traffic movements and therefore carbon emissions and provide improvements to the current site.

Charlton Lane is listed in the Waste Plan as one of 4 sites in Surrey as suitable for thermal treatment. The WDA has identified Charlton Lane as the most suitable site for this type of development.

- **What do all of the facilities within the Eco Park need to be located at the site?**

Co-location of the facilities (gasification and anaerobic digestion (AD) facilities together with the CRC) on one site provides a number of benefits. These include:

- The outputs from one process can be used to feed into another. This will help to improve the efficiency of all the facilities that make up the Eco Park;
- If any material from the CRC is not suitable for gasification, it could be bulked in the on site waste transfer station prior to onward transhipment for disposal, resulting in fewer vehicle movements;
- Having the bulking and baling facilities and CRC together on one site means that recyclables from the CRC could be baled and greater loads achieved, reducing the overall waste vehicle miles;
- There is the potential to save energy by using the waste heat from the gasification plant to warm the buildings;
- All the elements are able to use shared infrastructure, including weighbridges, offices, site personnel, car parking and security;
- The AD and gasification facilities can provide an on-site renewable energy supply all elements could run off a single sub-station;
- There is potential for the gasification plant to treat the air from the anaerobic digestion plant to reduce the potential for odour;

- **Will Charlton Lane deal with all of Surrey's waste?**

No. The Eco Park will handle less than 30 per cent of Surrey's household waste, with the remainder being processed at other locations. The majority of household waste, such as green waste, dry recycling or excess residual waste will continue to be dealt with elsewhere in Surrey or outside of the county.

- **Is there a difference between Energy from Waste and Gasification? Isn't Gasification another form of EfW?**

While there are some similarities between EfW and gasification there are also major differences. Gasification is an advanced thermal treatment (ATT) where waste is heated in the presence of a small amount of air but not enough to be set alight. This produces a gas, called syngas, which is then captured and is burnt in another compartment to produce energy. The temperatures used in gasification are typically above 650°.

The type of gasification that is proposed at the Eco Park is a specific type of gasification called Batch Oxidation System. The following table outlines the main differences between the proposed batch process gasification technology and EfW:

| Batch Process Gasification  | EFW  |
|---|--|
| <ul style="list-style-type: none"> <li>▪ Waste smoulders with little air in primary chamber to produce syngas</li> <li>▪ Combusts syngas in secondary chamber</li> <li>▪ Lower volume of fly ash</li> <li>▪ Lower building height</li> <li>▪ Batch process</li> </ul> | <ul style="list-style-type: none"> <li>▪ Waste burns in presence of much air</li> <li>▪ Full combustion in one and only chamber</li> <li>▪ Higher volume of fly ash</li> <li>▪ Taller building</li> <li>▪ Continuous feed</li> </ul> |

- **Will Residents Associations be able to have presentations at the meetings?**

If a Residents Association would like to hold a meeting to discuss the proposal with SITA, the applicant please contact SITA directly.

- **Where will the application be submitted to?**

The application will be submitted to the County Planning Authority, SCC.

- **Has the Walton Bridge development been taken into consideration as part of the Eco Park development?**

A traffic assessment will be required as part of any planning application for the Eco Park development. This assessment will need to take into account the impact of traffic from other developments which are likely to be happening in the nearby area both during the construction and operation of the park. This would include the proposed rebuilding of Walton Bridge. Similarly we would expect traffic assessments for any future development of minerals sites to take into account the impact of the Eco Park, and vice versa.

If traffic levels are found to be unacceptable due to the intensity of development within the area, it is likely that the highway authority would require some mitigation in terms of restricting vehicle movements associated with a particular development. This might mean that some developments would have to be phased to fit within the restrictions.

- **How does the technology proposed differ to the technology at Isle of Wight?**

On 30<sup>th</sup> May 2010 it was reported in the Isle of Wight News that processing had been suspended at the Isle of Wight waste gasification plant due to “abnormal” emissions of dioxins. The plant is operated by Energos.

The gasification facility proposed for the Ecopark at Charlton Lane uses a completely different technology to that supplied by Energos. The technology proposed for the Ecopark is a Batch Oxidation System supplied by Ascot Environmental. The flue gas cleaning system will be designed to work with this particular technology from the outset.

A plant using the Batch Oxidation System is currently being operated in Dumfries and we are not aware of any problems with emissions from this particular plant.

## **2. ANALYSIS and COMMENTARY**

- 2.1 The purpose of this report is to provide an update to the Spelthorne Local Committee on the proposed Eco Park at Charlton Lane, Shepperton. Further updates can be provided at future meetings when required.

### **Report by:**

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**BACKGROUND PAPERS:**