



Real Rubbish: Frequently Asked Questions November 2011

1. What is residual waste or 'black bag' rubbish?

It is the waste left over after we have reduced, reused, recycled and composted as much as we can.

2. Why can't we recycle and compost all of our waste?

Potentially some 70 per cent of household waste can be recycled or composted. Not all things can be recycled, particularly if they are made of more than one material which may make them difficult to separate. This means it takes so much energy to recycle that it outweighs the benefit. For example, a biscuit packet can be made of plastic film and paper, which cannot be easily separated.

3. What's the council's approach to waste management?

The council's overall objective, in line with the waste management hierarchy, is to reduce, reuse, recycle and recover (the 4Rs). 'Recycling' often gets the most attention but we also recognise that the 'reduce' also needs to be addressed and we welcome initiatives such as 'lightweighting', whereby the weight of containers is reduced, and other initiatives to reduce packaging. The council notes, in terms of recycling, that the top five European countries have an average of 60% recycling but recover 37% of their waste through thermal treatment. Like them we accept that there is a percentage of waste (eventually around 30%) that cannot be dealt with through 'reduction, reuse and recycling' and that the most environmentally and financially responsible way of dealing with this is to 'recover' with landfill only being used as a last resort.

Gloucestershire has increased its recycling rate from 24% in 2004/5 to 48% in the year to date. This represents a tremendous achievement by the people of Gloucestershire and the staff and contractors responsible for collection services and household recycling centres. The current recycling target is 60% by 2020. Gloucestershire County Council's aspiration is to achieve 70% recycling by 2030.

4. So where exactly are you in the process right now?

The County Council is currently undertaking discussions, as part of a formal procurement process, with two bidders to develop and run a waste management facility to treat Gloucestershire's residual waste. The names of bidders are:

- Complete Circle (a consortium of John Laing, Keppel Seghers and Shanks)
- Urbaser with Balfour Beatty

Any waste management facility requires planning permission and an environmental permit. As part of preparations for a planning application, each bidder is committed to undertaking its own community consultation for their project proposals. Both bidders began their pre-planning consultation in July, which includes a joint public exhibition and are carrying out a second exhibition this November (please see below for more details).

The County Council has requested that both bidders progress with preparations for a planning application, which would only be submitted in the event that they are selected to provide the facility. This selection is planned to take place in Winter 2011.

The second exhibition is also taking place on the Javelin Park site itself on:

- Saturday 12th November – 12pm till 6pm
- Sunday 13th November – 12pm till 4pm
- Monday 14th November – 2pm till 8pm

At this public exhibition, local residents and businesses will be able to review the final schemes from both bidders and see how their comments and contributions have been taken into account.

5. Why don't we continue to landfill the waste we cannot recycle or compost?

Disposing of untreated waste to landfill is both environmentally damaging and very expensive and we are also running out of landfill. When untreated waste is buried underground, it produces methane. This greenhouse gas is over 20 times more potent than carbon dioxide and is one of the contributing factors of climate change. In addition, this year the County Council has to pay landfill tax to the government at £56 for every tonne of waste that goes to landfill. This figure is increasing by £8 each year and will increase to £64 in April 2012. Councils have also been set limits by central government on how much biodegradable rubbish they can send to landfill. This limit decreases each

year and the County Council faces fines of £150 for every tonne over the quota set.

The County Council has compared the costs of continuing the current residual waste procurement project with continuing to landfill. This shows that continuing to landfill, compared to options proposed by bidders in the current procurement, would cost the County Council around an estimated additional £150 million over 25 years.

6. Why can't we take our waste to an already established facility outside the county?

We have explored joining up with other local authorities nearby in the same situation, but they have either been in different phases of the procurement process or there is no capacity available or appetite to import waste. As part of the competition bidders were free to submit a solution that processes waste outside the county.

7. What alternatives to landfill have we considered for Gloucestershire?

The County Council has looked into a wide range of technology options, which include, as examples:

- a. **Two forms of Mechanical Biological Treatment (MBT).** This involves the materials being separated by machinery. The biodegradable (the bit that rots) part of the waste can produce compost or digestate that can be suitable for certain types of land, for example capping landfill sites. However it cannot be used on agricultural land under UK legislation. When using anaerobic digestion, this also creates biogas which can be burnt to produce electrical or heat energy. Other MBT processes can involve the waste being transformed into a fuel, which can then be burnt under strictly controlled conditions to generate power.
- b. **Autoclave.** This process cleans the different types of waste by using pressurised steam. The waste is then separated by machinery into materials that can be recycled and also a fibre fuel that can be used to generate power.
- c. **Energy from waste.** This involves the burning of waste under strictly controlled conditions to reduce its volume and hazardous properties. This generates electricity and/or steam for heating.
- d. **Advanced Thermal Treatment.** A newer generation of energy from waste technology that produces gases under conditions of very low oxygen. This can then be used to produce electricity and/or steam for heating.

The government department, Defra, has produced a series of books to help explain about the different technologies. For more details on all of these technologies visit

<http://www.recycleforgloucestershire.com/recover/downloads/index.html>

Although these technologies have been considered, the County Council did not instruct private companies which technologies to use as we were technology neutral. Instead we set out what Gloucestershire needs to achieve and the waste industry has to demonstrate to us that their solution is the best way to solve our problem. The core technology which is currently being proposed by both bidders is Energy from Waste (incineration).

8. Wouldn't you still have to landfill some waste after it was treated using energy from waste?

There will always be a small amount of waste that will require landfill but this will be substantially reduced. This means environmental benefits as we landfill less, reducing methane production and our impact on climate change.

9. How much waste will the facility take and where will it come from?

The District Councils and the County Council have all agreed a target to recycle and compost a minimum of 60 per cent of household waste by 2020. The County Council also has an aspiration to achieve 70% recycling by 2030. Even if we achieve this, we estimate that we will still be left with approximately 150,000 tonnes of waste to deal with by 2040.

Bidders have sized their facilities to treat Gloucestershire's waste. Any future spare capacity will be made up from Gloucestershire's commercial waste.

10. With recycling rates increasing, what happens if the facility doesn't have enough waste to be cost effective?

We will make sure that the contract with the private company that will run the facility is flexible. Any shortfall of waste could be made up with waste that can't be recycled from Gloucestershire's local businesses. We will continue to increase overall recycling and composting rates as much as we can.

11. Where would the facility be based and is there an option of having more than one?

For the management of residual waste, Javelin Park is now the preferred site for both bidders. Ancillary services or activities may take place at other.

12. Are there potential health risks for residents living near a facility?

Any treatment facility will need to be licensed by the Environment Agency which has the responsibility for regulating waste treatment plants. The Environment Agency has very strict rules for such facilities and will not allow anything that is unsafe. The Environment Agency has a position statement on waste incineration which can be found on their web site.

13. What about incinerators? Don't they pollute the atmosphere and contribute to ill health?

The European Waste Incineration Directive, which became law in 2002, imposed stricter emission levels and increased the monitoring of facilities. Emissions of dioxins from Energy from Waste facilities have fallen by 99.8% in the last 20 years. An independent study, published by the government department Defra in 2004, found that Energy from Waste facilities are not a major contributor to air pollution. This view is shared by the Health Protection Agency in its report *The Impacts on Health of Emissions to Air from Municipal Waste Incinerators, February 2010*.

14. So you're saying there won't be any harm to local vegetation or wildlife?

There is no scientific evidence to suggest that there would be any harm and several studies have been completed using ground samples taken from sites close to incinerators.

15. What about vulnerable people like my children or older people?

Again, several studies have failed to identify a link between incineration and ill health.

16. How are the emissions from the incinerator dealt with?

The emissions from the incinerator are collected through a highly sophisticated cleaning system known as an air pollution control (APC) system. Any residues are contained and disposed of safely.

17. So what exactly can I see coming out of the stack?

What you can see occasionally is steam, which is usually only visible during humid and cold weather.

18. How often are the filters cleaned?

This will be decided by the Environment Agency as part of the permitting role. It will also be detailed in any maintenance elements of the contract with the County Council.

19. How often are hazardous residues taken off site and where do they go?

Again, the Environment Agency will be involved in this aspect. Both bidders are currently looking at options for APC residue disposal and should be able to explain further details at the second exhibition.

20. Are there examples of incinerators near local housing in the UK and abroad?

There are many, some of which have been developed by our bidders. Most major European cities have energy from waste facilities as integral parts of their infrastructure located within areas of dense population.

21. Could the facility catch fire or be vulnerable to explosions or terrorist attacks?

Fire safety will be an integral part of the facility's operation. There will be an emergency plan to cater for all types of emergency and crisis situations.

22. Will a waste facility generate extra smell?

Any facility will use the latest technology. Any buildings where waste is taken to will use negative air pressure to prevent smells being released into the atmosphere. This will be effective, even when the doors of the facility are open.

23. Will a waste facility attract vermin?

Effective vermin control will be in place. Facilities and storage of waste will be managed to prevent problems with vermin.

24. Will traffic levels near the plant increase significantly and cause chaos on the roads?

As part of the planning process, a detailed traffic assessment will be carried out. Any new facilities would not be operational until 2015 and any necessary road improvement work will be carried out well before then to make sure there is enough capacity on the road network.

25. What will the facility look like?

Modern waste facilities are designed to take account of the local environment and any national and local planning guidance. As part of the planning process, the visual impact of the facility will be considered. This aims to make sure the building is appropriate to its surroundings. Bidders will be providing details of the designs at the second exhibition this November.

26. Who will decide which bidder will provide the facility?

Gloucestershire County Council is the waste disposal authority and your elected members will make the final decision. Officers will make a recommendation to elected members based on how well the ideas submitted by both bidders meet our needs, based on an evaluation framework. Cabinet will make a decision on the preferred bidder towards the end of 2011. The final decision will be agreed by the Council and is likely to be in the summer of 2012.

27. What factors will be considered when deciding on energy from waste?

An evaluation framework has been developed, which is used to evaluate the bids put forward by the waste industry. It covers technical, legal and financial issues including for example environmental impact and affordability, as outlined in the cabinet report November 2008.

28. How did the council develop this evaluation framework?

The County Council started with its own ideas on what was important and then we incorporated advice from our legal, financial and technical consultants who work on similar projects across the UK. It also took the priorities and issues outlined as part of previous consultation on technology options. Once there was a broad outline, the County Council took the main issues from the framework and asked stakeholders (including members of the public, county councillors, environmental groups and waste companies) what they thought were the most important through an extensive consultation exercise during the summer of 2008. This informed the final evaluation framework.

29. What steps will need to be taken before the facility gets built?

Gloucestershire County Council is the waste planning authority and it is their responsibility to produce the Waste Core Strategy and to deal with planning

applications for waste. The County Council's planning responsibilities are independent of the county council's waste management team, which manages the project.

Your elected members from the Planning Committee will make a decision on planning grounds, based on all the information provided as part of the planning application process, as to whether or not a facility can be built at a particular site or sites. This will be an open process that will allow for public consultation.

30. How much will a waste facility cost and who will be paying for it?

Designing, developing and operating an alternative to landfill is expensive — however continuing to landfill, compared to options proposed by bidders in the current procurement, would cost the County Council around an estimated additional £150 million over 25 years.

So, even if we ignore our environmental responsibility to find a more sustainable option it is still more cost effective to find an alternative to landfill than carry on as we are. It will be paid for using the County Council's budget made up from council tax.

31. Isn't 25 years too long to be tied into a commercial contract with a waste company?

In part the length of the contract is related to the life of the assets. A commercial contract is a lot like a mortgage for your home, if you choose to buy your house over a shorter period, your payments will be a lot higher than if you choose to pay your mortgage off over a longer period of time. Therefore we need to consider and balance the contract length against what the County Council can afford annually.

Writing off assets half way through their life is expensive. We have produced waste for hundreds if not thousands of years so in the scheme of things, twenty five years is perhaps not as long as it seems.

32. If so much money is being invested in this project, will it be at the detriment of recycling facilities?

Gloucestershire County Council's aspiration is to achieve 70% recycling by 2030. We are still committed to reaching our joint target with the district councils of recycling and composting a minimum of 60% of waste by 2020. This has been agreed by all of the districts councils, who have signed up to a long-term plan to deal with Gloucestershire's waste called the Joint Municipal Waste Management Strategy.

33. How many jobs will a waste facility or facilities create?

The development of a new waste facility or facilities could create about 250 jobs during construction and a smaller number of jobs when any facility is operational.

34. Why did the Department of Food and Rural Affairs (Defra) withdraw PFI funding?

In October 2010, Defra announced the withdrawal of PFI credits from seven waste projects including Gloucestershire. The reason given for the withdrawal is that Defra believes that the UK is likely to meet its EU targets for reducing the amount of biodegradable municipal waste (the bit that rots) going to landfill by 2020. Defra have subsequently confirmed in writing that at a local level the council still needs to find a sustainable solution for managing residual waste and continue to divert waste from landfill. Defra's reason for the specific withdrawal of Gloucestershire's credits relates solely to the maturity of the project (others were further advanced) and this has been confirmed in the Defra report and was not a criticism of the project. The County Council then carried out a review whether we still need to stop sending rubbish to landfill and if we could afford the project. We also wanted to give stakeholders the chance to engage with us.

35. Did the re-appraisal include any consultation?

Formal consultation was not a requirement of the strategic re-appraisal. However, as part of the strategic re-appraisal, members of the public and interest groups were invited to submit their views based on a series of themes:

- Does Gloucestershire need an alternative to landfill?
- What are the affordable alternatives to landfill, and can you give examples of where these have worked?
- How would you make up for the loss of PFI credits to be able to afford the alternatives?
- How will your alternative solution enable Gloucestershire to meet current government targets and future policy for waste disposal?

A total of 22 written responses were received from 12 groups or organisations and 10 individuals. A summary of the responses and other issues raised were published as part of the cabinet report for 16th March 2011.

36. What did the strategic re-appraisal conclude?

The strategic re-appraisal has demonstrated that there is still a valid need for a residual waste treatment facility to divert Gloucestershire's household waste from landfill. This fits within an overall waste strategy for Gloucestershire. It showed a broad acceptance by stakeholders that landfill is neither financially

nor environmentally acceptable. Ultimately, the question is one of sustainability, deliverability and affordability. The bids demonstrate that the current procurement route has the potential to offer a proven, affordable and safe long term solution to the people of Gloucestershire.

Cabinet approved a recommendation on 16th March 2011 for the continuation of the current procurement following the strategic re-appraisal and to approve the shortlist of two bidders to be Invited to Submit Refined Solutions (ISRS).

37. If we have lost £92 million towards the project, how can we afford to carry on?

Ultimately, what determines whether we go forward is whether this project is cheaper than continuing to landfill, which it is.

The County Council has compared the costs of continuing the current residual waste procurement with continuing to landfill. This shows that continuing to landfill, compared to options proposed by bidders in the current procurement, would cost the council around an estimated additional £150 million over 25 years.

38. How can I find our more information?

www.recycleforgloucestershire.com/recover has all the latest information on the project including downloads and timelines. You can also email or write to us at the address below:

Waste Management Unit
Gloucestershire County Council
Block 5, Shire Hall
Westgate Street
Gloucester GL12TH recover@gloucestershire.gov.uk
