Gloucestershire Waste Core Strategy (WCS)

Focused Changes

Summary of Key Issues

June 2011

Introduction

The Gloucestershire Waste Core Strategy (WCS) was formally published in December 2010. In response 48 individuals and organisations commented, raising just over 200 separate responses.

The purpose of this statement is as follows:

- To identify the key issues raised by respondents; and
- To set out the Council's response to those issues.

This summary statement should be read in conjunction with the full response schedule available separately.

The Key Issues

The following key issues have been raised by respondents (in no particular order):

- Landfill capacity
- Commercial and Industrial (C&I) waste arisings
- Municipal waste arisings
- Zero-growth target
- Recycling/composting target
- Anaerobic digestion (AD)
- Bulking and transfer
- Current planning application at Wingmoor Farm (East)
- Combined heat and power (CHP)
- Sustainable transport
- The promotion of small-scale dispersed facilities
- Integration of municipal and commercial and industrial waste
- Habitat Regulations Assessment (HRA)
- Composting requirements

These issues are explained below together with the Council's response.

Landfill Capacity

The publication WCS sets out the situation in relation to current landfill capacity in Gloucestershire. For non-hazardous landfill it states that there is *'at least 10-13 years remaining capacity although this is a conservative estimate and could be significantly longer'*. For hazardous waste it is estimated that there is around 22 years of remaining capacity. The footnotes to these estimates explain that they depend on whether planning permission is granted in relation to the current planning application at Wingmoor Farm (East). If permission is refused there will be less non-hazardous and hazardous landfill capacity available.

The WCS also explains that there is significant available capacity for inert waste material both at landfill operations and through other permissions including mineral restoration and engineering.

Relevant background information is set out in Section 11 of the Technical Paper WCS – A Waste Data Update (2010) which provides the most up to date position on landfill at the time of publication of the WCS. It provides a discussion of the waste data in relation to landfill and any assumptions made by the WPA.

Given the level of landfill capacity which is currently available, the WCS does not make specific provision for additional landfill but acknowledges that the situation will need to be reviewed regularly, with preparation of a landfill development plan document (DPD) to commence by 2017/18.

The Environment Agency (EA) in responding to the publication WCS has confirmed that it is happy with the Council's approach towards landfill capacity and provision. However, objections have been received from the landfill operators themselves.

Cory Environmental who operate the non-hazardous landfill sites at Hempsted (Gloucester) and Wingmoor Farm (West) suggest that the non-hazardous estimate of 10-13 years is an underestimate because the Council has under-estimated the amount of remaining landfill voidspace available and have over-estimated the likely annual waste input to these sites by not taking into account potential future reductions to landfill e.g. as a result of landfill tax.

Conversely, Grundon Waste Management Ltd. who operate the non-hazardous and hazardous landfills at Wingmoor Farm (East) argue that there is less than 10-13 years capacity remaining because the Council has under-estimated the amount of commercial and industrial (C&I) waste in Gloucestershire and has made the presumption that landfill capacity will continue to remain available at Wingmoor Farm (East) despite the fact that the current planning application at the site has yet to be determined.

In light of this, Grundon argue that at the present time, permitted non-hazardous landfill voidspace is less than 5 years and as such the WCS should include a policy on landfill or an earlier commitment to prepare a landfill DPD.

Council's Response

Section 11 of the WCS-A Waste Data Update (2010) sets out the latest data sources for landfill at November 2010 and assumptions that lead to an overall conclusion that there is sufficient landfill void for the time being and that there is no requirement for the WCS to have a specific policy at the present, based on the evidence. However it acknowledged that landfill still plays a role for integrated waste management in the future and that this issue will need to be kept under review. Hence the WCS suggest that such a review could potentially begin in 2017/18. This could commence earlier or later subject to ongoing monitoring.

As the main respondents to this matter are the two main landfill companies who have landfill operations in Gloucestershire they are both effectively suggesting a different outcome to that suggested in the WCS. Grundon are suggesting that landfill will have run out in five years and Cory Environmental suggest that landfill will last considerably longer than the 10-13 year range indicated by the WPA. The WPA has since had discussions with these operators concerning their representations. The WPA considers that the concerns that have been raised stem from making alternative assumptions as to what the outcome for future landfill might be. There are if you like alternative ‘what ifs’. In fairness to the respondents the WPA has returned to this issue because clearly it is in everyone’s interests to have a robust position on landfill data and what that means for

future landfill provision and policy. Below we explore some alternative scenarios in line with the issues raised by the respondents and then come to a conclusion as to whether any amendments are required within the WCS.

It should be noted that future landfill capacity isn't a new issue. The WPA explored six potential alternative scenarios in the Technical Evidence Paper WCS-A Waste Data (2007). The baseline at that point in time was that the 2005 managed figure indicated a throughput of around 500,000 tpa of non-hazardous biodegradable waste being sent to landfill (residual MSW & C&I) and around 220,000 tpa of inert material going to licensed landfill. The permitted void as of Feb 2007 was 8,985,000 m^3 as advised by the EA. That represented 20 years landfill life according to the EA which would last the life of the WCS to 2027. The data paper then went on to explore 6 potential scenarios for future landfill capacity. In summary these were.

1. Landfill lasts until 2020. Assumes all landfill is available, LATS targets are met and Wingmoor Farm East (Grundon) receives planning permission.
2. Landfill lasts well beyond 2020 and assumes that as landfills close the waste from them is sent somewhere else other than the remaining landfills. (*The closure of Frampton since 2007 suggests that this has happened from that particular landfill*).
3. 2019/20. Once a landfill closes the waste would transfer to another Gloucestershire unit.
4. 2013/14. Wingmoor Farm East is refused and closes.
5. 2030. Combination of waste reduction and diversion.
6. Beyond 2030 due to maximum recycling targets.

The compound void space required ranges from 6.5 million m^3 – 8.8 million m^3 depending on assumptions made. There are then current throughputs around 12.8 years but increasing to 17.5 years with diversion/improved recycling etc. The conclusions from this were that scenarios 1 – 3 were the most likely but scenario 4 was the likeliest option if Wingmoor Farm East was refused. This demonstrates that the WPA has been assessing this matter both through the Preferred Options stage and now at the publication stage.

Grundon Waste Management Issues -Taking the Grundon concerns regarding non-hazardous landfill first, the main concern is that the C&I waste figure used in the WCS is a managed figure and is less than that identified in the recently published DEFRA C&I study. Subsequent discussion with the operator regarding their objection has also clarified concern regarding the assumption that Wingmoor Farm East might be refused therefore a significant amount of landfill would be lost and that the review of landfill would need to begin immediately to allow lead-in time for new landfill to be sought and obtain planning permission. The conclusion of the operator is that waste will run out sooner than expected, potentially in less than five years time.

In relation to the DEFRA waste arisings study, the WPA response is outlined in this paper below. In summary the WPA consider that the DEFRA study provides some additional information but is not necessarily any more authoritative than using the data contained in the WCS-A (2010) Update. Although it provides arisings data rather than a managed figure, this has been obtained from a sample survey with sample audit. In addition care needs to be taken with the different categories of waste management methods.

In the case of the Grundon argument the assumption is that if the whole arising figure of 526,188 tonnes went to landfill then only 5 years landfill capacity remains. However the landfill breakdown appears substantially less (c. 114,000 tonnes). Confirmation with the EA and the consultants who undertook the study suggest that caution is required when using this data as more waste will have

gone to landfill following other processes such as transfer but which is not captured in this study. Also metals are included (which GCC specifically take out of the C&I waste) and in addition the DEFRA study doesn't indicate where waste is managed therefore does not inform on cross boundary movements.

Scenario of Wingmoor Farm (East) being refused planning permission. The concern regarding Wingmoor Farm East being refused planning permission in 2011/12 is an option which could be considered in this process. WCS-A Waste Data Update (2010) paragraph 11.1.4 and 11.1.5 outlines the situation and that the WPA had considered that the 2,824,500 m^3 at Wingmoor Farm East was available landfill capacity. Therefore if this landfill capacity is available, it is likely that landfilling will continue at Wingmoor Farm East to the WCS end date of 2027 and potentially beyond. Grundon's own planning application submitted in 2009 envisages non-hazardous landfill lasting until 2029 and current throughputs might indicate that picture lasting longer still.

However if the capacity at Wingmoor Farm East was taken out of the equation, the landfill available would be 3,205,000 m^3 (effectively the capacity remaining at Wingmoor Farm West and Hempsted). Therefore if this scenario were to occur the following outcomes might result:-

Outcome 1. If the 2010 current baseline data based on 437,122 tonnes landfill throughput was used, overall landfill capacity would last for about 7 years. As the baseline year is 2008 this would mean landfill lasting to 2015. Cory Environmental suggest that it should not be assumed that the C&I waste they currently do not receive, would automatically come to their sites for disposal. However the WPA view is that this waste would need to be managed somehow either through recycling, treatment and some disposal as it is assumed that a reasonable percentage of this waste would arise in Gloucestershire.

Outcome 2. If the 2010 baseline data was used but only the existing throughputs to the remaining Cory landfill sites were landfilled, this would be 344,189 tonnes. This assumes that the Wingmoor Farm East waste is diverted away from landfill. This would mean that landfill would last around 9 years to 2017.

Outcome 3. That the throughput of 344,189 tonnes remains broadly the same for around 5 years to 2013/14 but at that point major diversion would kick in. For example the diversion of MSW through recovery treatment would mean a huge diversion of most of that waste stream (assume year on year c.8,000 tpa WCS –A Waste Data (Update) 2010 MSW Table 3l, current C&I c.40,000 tpa to Cory sites, and c.95,000 m^3 of C&D continues).

344,189 x 5 years = 1,720,945 void. If it is assumed 1,485,055 m^3 void remains after 5 years, this would last a further 10 years to 2025. (143,000 m^3 x 10.4 years = 1,485,055).

Outcome 4 is to factor in potential for further C&I and in particular C&D diversion this could last longer still perhaps to 2029.

It should be noted that assumptions are made using the baseline as known from 2010 (actual data for 2008 – 2009) therefore some account would assume that some of the landfill from Wingmoor Farm West would have already been used for landfill.

This demonstrates that in a scenario where Wingmoor Farm East ceases to be available from 2011/12 that a number of outcomes could result such as landfill lasting anything between 2015 in the shortest scenario to up to 2029 in the longest.

Cory Environmental Ltd Issues. The main concern from Cory with regards this issue is that the reference in the WCS to between 10-13 years life at the non-hazardous landfill sites in Gloucestershire is considered inaccurate due to a combination of an underestimation of available landfill void and an overestimation of residual MSW, C&I and C&D to landfill. Cory argues that this has a knock-on to other aspects of the WCS. In relation to Commercial and Industrial waste concerns these are highlighted mainly under the sub-section concerning C&I below.

In relation to landfill void Cory state that the landfill void at their two sites amount to 3,205,000 m^3 as at 31st December 2009 as opposed to 31st March 2009. In effect a nine month difference. This would provide around 5.5 years at Hempsted and around 17 years at Wingmoor Farm West from 1st January 2010. The WPA has looked at the potential impact on the life of landfill in the WCS and considered that the need to alter the overall lifetime of landfill capacity seems rather marginal. This doesn't alter the fact that Cory consider that Hempsted will be complete in 5 – 6 years and Wingmoor Farm West in around 17 years. In subsequent discussions with Cory post-publication regarding their representations, they are firmly of the belief that Wingmoor Farm West will last through the period of the Waste Core Strategy even taking into account the impact of Hempsted being completed around 2016 and of Wingmoor Farm East not receiving planning permission.

In relation to an overestimation of future residual MSW to landfill the WPA is advised by the WDA as to what future requirements are for MSW.

In addition Table 3m of the WCS – A Waste Data Update (2010) clearly identifies that there is 3,205,000 m^3 of landfill void remaining at the Cory landfill site sufficient to meet the potential future requirements of residual MSW for over 20 years including the amount of both C&I and C&D which is also tipped. In Table 3n the MSW requirement at 2009/10 – 2020/21 is 2,107,264 m^3 which again is sufficient to meet the requirements well beyond the MSW LATS target date. Further the MSW requirement over the WCS timeframe is identified in Table 3o of 2,894,479 m^3. Therefore there is also sufficient capacity to meet those requirements.

The WPA has met with Cory Environmental to try and clarify the response and if possible to reach some consensus. The WPA has suggested Cory presents some alternative data if they consider that WCS – A Update (2010) to be incorrect. However Cory still reiterate that they consider the use of the data regarding MSW in its current form is wrong along with the advice of the WDA to the WPA. The fundamental plank appears that they wish the WDA to provide some alternative advice. The WDA have provided a revised projection for residual waste (see municipal waste arisings below) but it doesn't have a significant overall effect on the provision required in the WCS in relation to landfill. The WPA suggests that some of the concern might stem from the final column of Table 3l of WCS –A (Update) 2010.

These totals do provide the basis of the possible landfill capacity requirements given in Table 3n and 3o as referred to above. For example in Table 3l year 2006/07. MSW arisings are 324,143 tonnes, 32% of the arising is 103,726 tonnes. That is the maximum inert which can be landfilled on top of the LATS allowance. Therefore the possible landfill capacity allowing for both the Government set allowance (LATS) and inert waste is 262,360. However actual landfill for that year was 214,969 tonnes. Following a further audit of these figures a confusion may have occurred as for years 2007/08 and 2008/09 a calculation error has occurred and the capacity should be 253,935 rather than 256,340 in 2007/08 and 237,047 rather than 246, 661 tonnes for 2008/09. The remaining years are correct. However around 12,000 tonnes error over the total landfill capacity of the WCS isn't profound.

However there are alternative scenarios which could be derived using the residual waste totals after treatment rather than possible capacity required. This would result in a projection of 792,994 tonnes of MSW waste to landfill between 2009-2014. From 2015 this is around 7,000 – 8,000 tpa following treatment assuming MSW recovery capacity comes on line. This would mean that the requirement for landfill of MSW would be 845,953 tonnes to 2020/21 and 901,814 tonnes to 2027/28. There would still be requirements for landfill of some C&I and C&D waste on top of that. Broadly speaking this is similar to the *outcome 3* identified under the Grundon issues raised above. Clearly in this eventuality this could also result in current landfill void lasting much longer than the conservative 10- 13 years range.

In relation to Commercial & Industrial waste Cory Environmental have, following the clarification meeting, highlighted a range of matters which they consider provide that the evidence base is unsound. Again much of this seems to be related to the WPA use of different datasets in WCS-A Update 2010. For example the difference between operator and EA returns regarding C&I inputs. The margin between the two different data sets directly relates to the 13 – 10 years landfill life range used by the WPA (para 11.4.15 and 11.4.16)**.** It should be emphasised that the dataset 2 (landfill input figures from operators) directly feed in to the 13 year landfill life projection therefore the WPA strongly refutes that the WCS is underpinned by an unsound evidence base.

Cory Environmental also point to projections made for C&I in other parts of the country and argue that the projections all show a downward trend. As demonstrated above there are any number of possibilities that could be made and if the WPA possessed a 'crystal ball' which could pick the right outcomes. However the WPA would maintain it has used the evidence base correctly in terms of current baseline data and the future capacity requirement ranges from the SW RSS to provide a guide to future C&I capacity waste management and hence landfill requirements. These all show a much lower future landfill requirement for C&I landfill than Cory claims the paper is identifying. Whilst the overall growth in C&I waste in WCS- A Waste Data Update (2010) is 0% the potential scenarios for landfill of this waste stream is declining. This is recognised in para 11.4.20 that landfill will last longer if inputs decline further.

This theme from Cory is continued with regards Construction and Demolition waste. The WPA assume again 0% growth in arisings but that the target to landfill should reduce by 50% and what will potentially be sent to landfill. Therefore there is a clear projection of declining inputs. However it should be remembered that some other operators specialising in the management of this waste stream consider that greater provision needs to be identified for future disposal requirements.

In relation to criticism regarding the different datasets used the differences and the issues or assumptions are all listed in the paper WCS – A Waste Data (Update) 2010. However the following discussion might assist in clarifying matters. With regards dataset 1 this uses a combination of WDI data information (the main data discs provided to the WPA from the EA) and the assumptions made by the WDA for MSW. The conclusion contained in the paragraph 11.4.15 of WCS-A Waste Data (Update) 2010 is that this would provide for around 10 years (2019/20) although the caveat is that this is a conservative figure. As indicated elsewhere above in this report, there are any number of scenarios with alternative assumptions which can be made. Quite clearly if the majority of residual MSW is recovered from 2015 and diversion of other waste streams occurs the landfill will last much longer. Dataset two is provided directly from the operators and would indicate that landfill would last around 13 years (2022/23) based on current throughputs WCS-A Waste Data (Update) 2010. Clearly this could again be much longer assuming greater recycling and diversion from landfill.

What should be remembered in this is that the WPA has presented both datasets which influence the range of landfill capacities required. Overall it should be stressed the range is broadly accurate to the satisfaction of the EA and the Companion Guide to PPS 10 warns against 'spurious precision'.

WPA Conclusion

The responses raised by both Grundon and Cory are arguing that the current landfill may last shorter or longer than indicated within the WCS depending on alterative assumptions and viewpoints. Therefore the picture of how long the current landfill will last is not entirely clear. As demonstrated elsewhere above there are a number of alternative scenarios that can be projected, some suggesting the 10 – 13 year range for landfill to be a starting point but with caveats that this could be conservative. Void space should last until the 2020 LATS allowance milestone and there is a good chance that it is more likely that there is sufficient void space to last the WCS end date of 2027.

There is one possible scenario with the refusal of Grundon that void space could last only until 2015 although even in this scenario there are numerous other potential outcomes. On review of the position the WPA considers that the 10 – 13 years range can be justified although it is acknowledged that it is very conservative and could last longer.

However in considering these alternative scenarios the WPA does acknowledge that in line with concerns from Grundon that should Wingmoor Farm East be refused and subsequently dismissed on appeal and therefore ceases to operate that the WPA will need to potentially bring the review of the landfill position forward.

Rather than this potentially beginning in 2017/18 the review process would need to follow the likely WCS adoption in early 2012. The progress of the Wingmoor Farm East planning application would also be clearer at that stage. It would not be practical to delay progress of the WCS now to await the outcome of that process which could take some time. Rather a further landfill DPD could be produced incorporating a partial review of the WCS regarding landfill policy if need be.

The main issue is to acknowledge this possibility and a change is therefore proposed to paragraph 4.129 of the publication WCS to reflect this.

See Focused Change 26.

In addition the WPA will include additional caveats in line with the concerns from Cory that landfill may last longer due to alternative scenarios whereby potential future diversion rates from landfill across all waste streams mean landfill lasts to the end of the WCS timeframe (2027) and potentially beyond. It is therefore proposed to amend paragraph 4.125 to reflect this possibility.

See Focused Change 25.

However the situation will still need to be monitored carefully as outlined in paragraph 4.126 of the WCS and notwithstanding the concerns raised by Grundon.

Commercial and Industrial (C&I) Waste Arisings

Commercial and Industrial (C&I) waste is that which is generated by shops and businesses. It is similar to municipal waste but is generally collected and managed by private companies rather than local authorities.

The publication WCS identifies that in 2008 the total amount of C&I managed in Gloucestershire was 375,000 tonnes. This is taken from data provided by the Environment Agency (EA) and is the amount of C&I waste managed at licensed waste management facilities in Gloucestershire. This is considered to be a reasonable proxy of how much should be planned for in the future.

However, shortly after the WCS was published in December 2010, DEFRA published a study on C&I waste 'arisings' in 2009 i.e. the amount of waste produced not just how much is managed. Notably, the 'arisings' figure for Gloucestershire was 526,188 tonnes, significantly higher than the managed figure of 375,000 tonnes.

Council's Response

The DEFRA study was published after the WCS and could therefore not be taken into account. In any case there are a number of reasons why it is considered appropriate to use the managed figure of 375,000 tonnes per year.

First it is a known quantity rather than an estimate as it is taken from data provided by the Environment Agency (EA) and waste operators.

Second, the figure of 375,000 tonnes does not include metal waste as it tends to skew the data. However, metal forms a significant proportion of the C&I waste stream and when it is included, the managed C&I figure is closer to the DEFRA arisings estimate.

Third, not all of the 526,188 tonne arising figure will be managed in Gloucestershire, some will be exported and dealt with at facilities outside the county.

Fourth, the DEFRA study itself has a number of limitations including the fact that the survey was voluntary which means it is likely to have captured data from companies that are progressive in their approach to managing waste, the fact that the survey is for 2009 only, a year within a significant recession, the data provided may be inaccurate or have failed to capture all material streams, the survey only gives a 'one-day' picture of overall arisings and composition of mixed-waste streams and there may be overlap with MSW data.

For these reasons, it is considered appropriate to continue using the managed figure of 375,000 tonnes per year. However the DEFRA study does provide the latest and best position with regards what level of C&I waste might be arising within Gloucestershire. Therefore the publication WCS has been revised to include reference to the DEFRA study.

See Focused Change 3.

Municipal Waste Arisings

In relation to municipal waste (MSW) the publication WCS identifies the need to provide approximately 150,000 tonnes per year capacity of residual waste treatment. 'Residual' waste is that which is leftover after recycling and composting and typically consists of 'black-bin' waste from households.

The 150,000 tonne/year requirement is based on information provided by the Waste Disposal Authority (WDA) in 2010 which shows that by 2014/15 the amount of municipal waste arising will be 311,753 tonnes which, after recycling and composting, leaves 148,000 tonnes of residual waste, which has been rounded up to 150,000 tonnes.

A number of respondents believe that 150,000 tonnes is too high and does not take account of the recent downward trend in MSW arisings. Several respondents have suggested that the residual capacity requirement should be reduced and some have suggested using a range (e.g. 60,000 – 134,000 tonnes).

Council's Response

It is acknowledged that waste arisings have fallen in recent years. In 2006/7 the amount of MSW arising in Gloucestershire was 324,143 tonnes and by 2009/10 this had fallen to 293,815 tonnes.

There are several reasons for this.

The local authorities in Gloucestershire have been implementing the Joint Municipal Waste Management Strategy (JMWMS). In particular, Cotswold District Council, Gloucester City Council and Tewkesbury Borough Council have all introduced changes to their services which have reduced municipal waste arisings. The service changes were expected to have this overall effect and the WDA tonnage modelling took this into account. In addition, the recent recession has undoubtedly had an effect on arisings.

It is however wrong to assume that service changes lead to year on year waste reduction.

The WDA has carried out modelling to forecast residual waste tonnages many times and have considered many factors in that modelling including population growth, District service changes, policy, Government forecasts and existing waste arisings.

Table 3l of the Waste Data Paper Update (2010) is based on information provided by the WDA at that time and forecasts that MSW arisings will increase to 359,612 tonnes/year by 2027/28. On this basis the WCS identifies a residual MSW requirement of 150,000 tonnes/year.

More recent modelling carried out by the WDA for the review of the residual project, based on 60% recycling by 2020 and 70% recycling by 2030, showed an annual forecast of approximately 155,000 tonnes of residual waste by 2040. A number of scenarios combining varying growth and recycling rates were also modelled. These show the projected levels of residual waste in 2030 to be between 125,000 tonnes (70% recycling and composting) and 165,000 (60% recycling and composting).

The WDA has also reviewed the Swedish Sustainable Waste Management Programme, which predicts that waste will grow at 2.2% per annum over the next 25 years. This aligns very closely with DEFRA growth scenarios[1] and the WDA's own modelling. The WDA has also had discussions on the latest national waste growth trends with DEFRA.

On the basis of the above, the residual MSW requirement of 150,000 tonnes/year identified in the WCS is considered to be robust and therefore no change is proposed.

Zero-Growth Target

The WCS spatial vision includes reference to achieving 'zero-growth' in waste production by 2020. This aspiration is taken from the Gloucestershire Joint Municipal Waste Management Strategy (JMWMS) which aims to reduce the growth of Gloucestershire's municipal waste arisings to zero by 2020. It was included as part of the proposed spatial vision at the 'preferred options' stage in 2008 and taken forward into the publication WCS.

A number of respondents argue that the aim of zero-growth by 2020 conflicts with the waste data underpinning the WCS, which shows growth of around 0.8% in the period 2020/21 to 2027/28.

Council's Response

There are several issues to raise in response. First, it is important to note that the zero-growth objective set out in the WCS is derived from the Joint Municipal Waste Management Strategy (JMWMS) which was adopted in 2008. In line with national policy and best practice, the WCS must help to deliver the JMWMS and on this basis it is entirely appropriate for the WCS to include the zero-growth target.

Secondly, notwithstanding the aspiration for zero-growth by 2020, forecast data provided by the WDA for publication of the WCS suggested that MSW arisings will increase by around 0.8% per year between 2020/21 and 2027/28. It is essential that adequate capacity is made available to deal with this forecast growth.

Thirdly, it is important to note that the target of zero-growth from 2020 is assumed to be at a household level. Therefore even if the aspiration for zero-growth were to be achieved, the anticipated growth in population and the number of households would still mean an overall increase in waste arisings.

For improved clarity it is proposed to amend paragraph 3.23 of the WCS to state that 'notwithstanding the aspiration for zero-growth, forecasts suggest that the amount of municipal waste will increase to 359,612 tonnes in 2027/8'.

See Focused Change 8.

[1] http://archive.defra.gov.uk/environment/waste/localauth/funding/pfi/documents/pfi-supporting-analysis-waste101206.pdf

Recycling/Composting Target

The publication WCS seeks to ensure that at least 60% of household waste is recycled or composted by 2020 with an aspiration for 70%. The target is derived from the Gloucestershire Joint Municipal Waste Management Strategy (JMWMS).

A number of respondents argue that 60% is not high enough and that a more ambitious target should be used e.g. 80%. This is because some authorities such as Cotswold District are already achieving high rates of recycling (60% in 2009/10) and there are specific examples from elsewhere such as the Cwm Harry Land Trust where very high rates of recycling and composting have been achieved.

Council's Response

The national target set out in the Waste Strategy for England (2007) is to achieve 50% recycling/composting by 2020. The Council's target of at least 60% by 2020 with an aspiration for 70% is therefore well above the national target and cannot be described as unambitious.

Whilst it is correct to state that higher than 60% levels of recycling and composting have been achieved in Cotswolds and at the Household Recycling Centres (HRCs) it is not correct to extrapolate this to mean that a much higher rate than 60% is achievable across Gloucestershire.

In reality, the Cotswolds achieved 60.85% in 2008/09 and have since dropped back to 60.23%. The HRCs have consistently achieved a much higher rate of recycling for many years but this is because it is easier to engage with the public at these sites and they can be encouraged to recycle at the point of disposal. This operation is very different to collecting waste door to door where the opportunities to engage are much more limited.

Using Table 3.6 of the Gloucestershire Baseline Report for the Joint Municipal Waste Management Strategy (JMWMS) to extrapolate that 90% of the waste stream is recyclable is an error. The table does not give sufficient information to make this calculation as the waste categories are too broad.

Using the categories of waste in the table below taken from “The Composition of Kerbside Collected Household Waste in Gloucestershire - Final Report - October 2008” study demonstrates that in fact about 77% of the waste stream is recyclable.

Gloucestershire - Study Average								
Material sub-category	Arisings, kg/hh/wk				Assay, %			
	DR	GW	RW	Combined	DR	GW	RW	Combined
Newspapers	0.78	0.00	0.33	1.11	29.1	0.0	3.1	7.5
Magazines	0.47	0.00	0.38	0.85	17.7	0.0	3.5	5.7
Yellow pages	0.01	0.00	0.01	0.03	0.4	0.0	0.1	0.2
Other recyclable paper	0.09	0.00	0.21	0.30	3.5	0.0	2.0	2.0
Paper packaging	0.01	0.00	0.06	0.08	0.5	0.0	0.6	0.5
Non-recyclable paper	0.01	0.00	0.58	0.59	0.2	0.0	5.4	4.0
Liquid cartons	0.00	0.00	0.04	0.04	0.0	0.0	0.4	0.3
Board packaging	0.01	0.00	0.30	0.32	0.5	0.0	2.8	2.1
Card packaging	0.02	0.00	0.48	0.50	0.6	0.0	4.5	3.4
Other card	0.01	0.00	0.05	0.06	0.4	0.0	0.4	0.4
Plastic Bottles: PET	0.02	0.00	0.18	0.20	0.8	0.0	1.7	1.4
HDPE	0.04	0.00	0.14	0.18	1.4	0.0	1.3	1.2
LDPE	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
PVC	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
PP	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
Dense plastic packaging	0.00	0.00	0.46	0.46	0.1	0.0	4.3	3.1
Other dense plastic	0.00	0.00	0.35	0.35	0.1	0.0	3.3	2.4
Other plastic film	0.00	0.00	0.36	0.36	0.0	0.0	3.4	2.4
Packaging film	0.00	0.00	0.43	0.44	0.1	0.0	4.0	2.9
Textiles	0.01	0.00	0.37	0.39	0.5	0.0	3.5	2.6
Shoes	0.00	0.00	0.05	0.05	0.1	0.0	0.5	0.3
Treated wood	0.00	0.00	0.07	0.07	0.1	0.0	0.7	0.5
Untreated wood	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
Furniture	0.00	0.00	0.04	0.04	0.0	0.0	0.4	0.3
Nappies/ Sanitary	0.00	0.00	0.43	0.43	0.0	0.0	4.0	2.9
Other misc. comb.	0.00	0.00	0.11	0.11	0.0	0.0	1.0	0.7
Carpet and underlay	0.00	0.00	0.02	0.02	0.1	0.0	0.2	0.2
Glass bottles: Brown	0.18	0.00	0.07	0.25	6.7	0.0	0.6	1.7
Green	0.39	0.00	0.10	0.49	14.7	0.0	0.9	3.3
Clear	0.31	0.00	0.12	0.43	11.5	0.0	1.1	2.9
Other	0.00	0.00	0.00	0.00	0.1	0.0	0.0	0.0
Glass jars	0.12	0.00	0.21	0.33	4.4	0.0	2.0	2.2
Other glass	0.01	0.00	0.03	0.04	0.3	0.0	0.3	0.3
Construction and demolition	0.00	0.00	0.06	0.06	0.0	0.0	0.6	0.4
Other misc.non.comb	0.00	0.00	0.10	0.10	0.0	0.0	0.9	0.7
Ferrous food cans	0.09	0.00	0.12	0.21	3.3	0.0	1.2	1.4
Ferrous beverage cans	0.02	0.00	0.01	0.04	0.8	0.0	0.1	0.2
Other ferrous metal	0.01	0.00	0.10	0.12	0.5	0.0	1.0	0.8
Non-ferrous food cans	0.00	0.00	0.03	0.03	0.0	0.0	0.3	0.2
Non-ferrous beverage cans	0.03	0.00	0.04	0.07	1.2	0.0	0.4	0.5
Other non-ferrous metal	0.00	0.00	0.04	0.04	0.1	0.0	0.3	0.3
Fridges, Freezers	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
Large hh Appliances	0.00	0.00	0.01	0.01	0.0	0.0	0.1	0.1
Small hh Appliances	0.00	0.00	0.02	0.03	0.2	0.0	0.2	0.2
IT & Telecoms Equip.	0.00	0.00	0.02	0.02	0.0	0.0	0.2	0.1
Consumer Equip.	0.00	0.00	0.03	0.03	0.0	0.0	0.3	0.2
Elec. & Electonic Tools	0.00	0.00	0.02	0.02	0.0	0.0	0.2	0.1
Toys,Leisure & Sports Equip.	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
Lighting	0.00	0.00	0.01	0.01	0.0	0.0	0.1	0.1
Monitoring & Ctl. Inst.	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
Other WEEE	0.00	0.00	0.01	0.01	0.0	0.0	0.1	0.1
Household batteries	0.00	0.00	0.01	0.01	0.0	0.0	0.1	0.0
Car batteries	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
Engine Oil	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
Other hazardous materials	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
Identifiable clinical waste	0.00	0.00	0.02	0.02	0.0	0.0	0.2	0.1
Home Compostable food	0.00	0.02	1.43	1.44	0.0	1.2	13.3	9.7
Non-home compostable food	0.00	0.00	1.57	1.57	0.0	0.0	14.7	10.6
Garden	0.00	1.25	0.25	1.50	0.0	85.6	2.3	10.1
Soil	0.00	0.11	0.04	0.15	0.0	7.7	0.3	1.0
Other organic	0.00	0.08	0.17	0.24	0.0	5.4	1.5	1.6
Material less than 10mm	0.00	0.00	0.59	0.60	0.1	0.0	5.5	4.0
Totals	2.68	1.46	10.72	14.86	100.00	100.00	100.00	100.00

It is estimated that to achieve a countywide recycling rate of 60% the collection authorities would need to capture 75% of the available recyclable waste at the kerbside which is significantly better than is currently being achieved (about 50% on average). The WDA has also modelled achieving a 70% recycling and composting rate across the County and this would mean capturing 92% of the available recyclables from the kerbside collected residual waste.

Clearly there will be some communities which will achieve higher recycling rates whilst others will achieve lower rates. It is anticipated for example that for 2010/11, Tewkesbury Borough Council will achieve a recycling and composting rate of 54% and Gloucester City 46%. This demonstrates that despite broadly the same system being introduced in all three areas; Cotswold, Gloucester and Tewkesbury, the overall performance is variable.

Taking the three areas of the County which have changed their services; Cotswold, Gloucester and Tewkesbury, gives an average recycling and composting performance of 53% which is 7% short of the 60% target.

For these reasons the WCS target of at least 60% recycling/composting by 2020 is considered to be both appropriate and challenging.

No change to the recycling target is therefore proposed, however the text of the WCS has been amended to clarify that the aspiration for 70% recycling/composting is to be achieved by the year 2030. This has arisen through the Council's review of its residual waste project.

See Focused Change 11.

With specific regard to the example of the Cwm Harry Land Trust, notably this has not reported on its findings yet so the assertions being made that it is a very cost-effective and efficient approach have not been demonstrated.

Anaerobic Digestion (AD)

The publication WCS highlights the potential role that could be played by AD in managing source-segregated organic waste such as food and garden waste. Due to the similarities between AD and in-vessel composting (IVC) the two processes are considered alongside each other and addressed through a single core policy WCS2 (which also incorporates bulking and transfer).

A number of respondents argue that given the Government's recent support for AD it should be considered in its own right with greater recognition being given to the potential it offers for generating renewable energy.

Council's Response

AD and IVC processes are reasonably similar and both require a segregated supply of organic waste such as food. It was therefore considered appropriate to address the two processes alongside each other in the publication WCS.

However, there is a key difference between the two processes insofar as AD produces biogas which can be used to generate heat and power or converted into bio-methane and used as transport fuel or exported to the national grid.

Due to the potential renewable energy benefits associated with AD it is accepted that it should be considered separately from recycling and composting with the potential benefits (e.g. renewable energy generation) able to be more clearly explained.

For this reason a new Core Policy and supporting text relating to AD have been drafted and included in the revised publication WCS after the section on recycling and composting. These clearly explain the potential benefits associated with AD such as renewable energy and combined heat and power (CHP) as well as setting out current Government policy.

The Council accepts that AD can also be classed as 'other recovery' and as such could be considered within the 'other recovery' section of the WCS. This is explained in the revised supporting text.

However, because AD is not generally suitable for managing mixed residual waste, we have put it alongside recycling and composting, thereby helping to avoid any confusion with Core Policy WCS4 which focuses on the provision of residual waste facilities.

See Focused Change 13.

Bulking and Transfer

Bulking and transfer facilities play an 'intermediate' role between the collection and disposal of waste, allowing for relatively small amounts of waste to be taken, sorted and stored until there is enough to transfer onwards to other waste facilities for further management or disposal.

The publication WCS considers bulking and transfer alongside recycling and composting because materials passing through both types of facility are generally destined for further processing operations.

A number of respondents argue however that the future requirements for bulking and transfer set out in the WCS are unclear and that bulking and transfer should be addressed separately as an issue in its own right, rather than alongside recycling and composting.

Council's Response

Notwithstanding the fact that there are some similarities between bulking and transfer and recycling/composting operations, it is acknowledged that the two processes could usefully be considered separately within the WCS. This provides the opportunity not only to more clearly articulate future bulking and transfer requirements but also to simplify Core Policy WCS2.

For this reason, additional supporting text and a new Core Policy dealing with bulking and transfer have been included in the 'minimising impact' section of the revised publication WCS.

See Focused Change 13.

Current Planning Application at Wingmoor Farm (East)

One of the largest existing waste management facilities in Gloucestershire is the Grundon site at Wingmoor Farm (East) near Bishop's Cleeve. The facility comprises a hazardous and non-hazardous landfill and other associated activities. Although planning permission expired at the site in 2009, because a planning application has been submitted, the current operation is being allowed to continue.

The planning application has not yet been determined and a number of respondents argue that not only does the WCS prejudice the application by assuming that planning permission will be granted but it is also unclear what will happen if planning permission is refused i.e. there is no 'Plan B'.

Council's Response

The WCS does not in any way presume that planning permission will be granted at Wingmoor Farm (East) nor does it prejudice the current planning application. The WCS simply reflects the fact that the Grundon operation at Wingmoor is continuing whilst the application is being determined and identifies the amount of landfill capacity which is currently available. It explains that this capacity is subject to the outcome of the current Grundon planning application.

It is acknowledged however that it could be made clearer what will happen if the application is refused i.e. an early partial review of the WCS or preparation of a separate landfill development plan document.

The supporting text at paragraph 4.129 has therefore been amended accordingly.

See Focused Change 26.

Combined Heat and Power (CHP)

CHP is a complementary technology that can work in conjunction with waste recovery facilities. It involves the use of a heat engine or power station to simultaneously generate both electricity and heat. It is a highly efficient form of power generation which prevents the usual escape of heat as a by-product. With CHP, both heat and power are able to be captured and used on-site or locally off-site.

The potential benefits of CHP are highlighted in Section 4.0 of the WCS however a number of respondents have called into question the extent to which the four strategic site allocations identified in Core Policy WCS4 will be able to utilise CHP due to the lack of nearby heat 'clients'.

Council's Response

Firstly, it is important to emphasise that the four strategic site allocations have been identified having regard to a broad range of factors including; availability, size, location, flood risk, transport etc. CHP potential is just one of a number of factors that have been taken into account by the WPA in deciding which sites to allocate. The chances of finding a site that ticks all boxes i.e. available, central location, outside the floodplain, plentiful nearby heat users etc. are remote. The Council has therefore had to balance all of these different factors in deciding which sites to take forward.

Secondly, it is not accepted that the strategic site allocations have limited potential for use of CHP. The potential scope for CHP at each site is clearly set out in the site schedules attached at Appendix 5. In addition, a separate supporting evidence paper on CHP has been prepared.

At Wingmoor Farm (East) for example there are over 35 businesses, 65 residential properties and two sporting clubs within 1km of the site. Within 2km there is a local plan allocation for new development and two potential housing sites identified in the District Council's Strategic Housing Land Availability Assessment (SHLAA) totalling around 7,300 properties.

Similarly, at Javelin Park there are over 30 businesses, 40 residential properties and one church within 1km and within 2km there are two local plan allocations and eight SHLAA sites totalling around 4,400 properties plus an existing planning permission for 1,775 properties at Hunt's Grove nearby.

It is therefore not accepted that the strategic allocations have limited CHP potential.

Thirdly, the WCS is technology neutral. The strategic site allocations that have been identified are capable of accommodating a range of different waste recovery technologies not all of which would necessarily generate a large amount of surplus heat (e.g. MBT).

Sustainable Transport

A number of respondents argue that notwithstanding the objectives of Core Policy WCS13 in relation to the promotion of sustainable transport, the four strategic site allocations are poorly located for utilising alternatives to road transport such as water and rail.

Council's Response

As explained above, the four strategic site allocations have been identified having regard to a broad range of factors including; availability, size, location, flood risk, transport etc.

The potential for utilising sustainable modes of transport is one of a number of factors that have been taken into account by the WPA in deciding which sites to allocate. The chances of finding a site that ticks all boxes i.e. available, central location, outside the floodplain and with excellent opportunities to use rail and water etc. are remote. The Council has therefore had to balance all of these different factors in deciding which sites to take forward.

Secondly, the sites do present some opportunity to utilise non-road modes of transport. The Wingmoor Farm sites for example have some potential to utilise the rail network subject to issues of viability and practicality.

Thirdly, the location of the strategic site allocations within Zone C will in general terms help to reduce the distance that Gloucestershire's waste travels by road by ensuring that the majority of the county's waste (which is generated in the central area at Gloucester, Cheltenham and other urban areas) is able to be managed close to source.

The Promotion of Small-Scale Dispersed Facilities

The WCS identifies four strategic site allocations. Each site is more than 2 hectares in size and capable of accommodating a facility managing at least 50,000 tonnes of waste per year. The four allocations are all located within the central area of the county defined as 'Zone C'. It is anticipated that they will manage the residual municipal and commercial and industrial waste that cannot reasonably be recycled or composted.

A number of respondents argue that because the amount of municipal waste is falling, strategic-scale facilities (>50,000 tonnes/year) are not needed and that provision should instead be made through a series of small-scale sites dispersed across the whole county. It is argued that this would encourage greater flexibility and community involvement and allow waste to be managed close to source.

Council's Response

The decision was taken to allocate sites within the WCS in order to provide certainty and to increase the likelihood of delivering an effective alternative to landfill. To ensure the site selection process was manageable, the Council decided to use a site-size threshold of 2 hectares/50,000 tonnes.

This threshold was based on other planned and existing waste facilities in the UK and also reflects the definition of 'strategic' in the adopted Waste Local Plan (2004) as well as a number of studies on potential facilities requirements for different types of waste technologies.

To have adopted a smaller site-size threshold would have potentially meant tens of thousands of sites across Gloucestershire having to be assessed which would clearly have been impractical.

Based on the 50,000 tonnes/year threshold, following a rigorous and extensive site selection process, four sites were allocated under Core Policy WCS4: Wingmoor Farm (West) Wingmoor Farm (East) Javelin Park and Moreton Valence.

Importantly, however whilst Core Policy WCS4 allocates the four strategic sites, it also allows for smaller-scale proposals to come forward speculatively subject to compliance with relevant criteria. Core Policy WCS4 therefore offers both certainty and flexibility and no change is proposed.

In relation to the issue of greater community involvement, the supporting text at paragraph 4.89 has been amended to acknowledge the fact that there may be interest in developing small-scale facilities from not only the waste industry, but also the development industry more generally as well as the local community and other stakeholders.

See Focused Change 19.

Integration of Municipal and Commercial and Industrial Waste

The publication WCS focuses on the four main waste streams; municipal waste, commercial and industrial waste, construction and demolition waste and hazardous waste. It explains in broad terms, the nature of each waste stream and the amount that is produced and/or managed within the county.

Municipal waste is the waste which is collected by or on behalf of local authorities. Most of it comes from households with a small proportion from local businesses and street cleansing etc. Commercial and industrial waste comes from shops, offices and factories. The biodegradable element of commercial waste is similar to municipal waste. The main difference is the fact that it is collected and disposed of by private waste management companies rather than the local authority.

A number of respondents argue that because of the similarities between municipal and commercial waste there should be closer integration of these two waste streams within the WCS.

Council's Response

The similarities between municipal waste and commercial and industrial waste are clearly acknowledged and reflected in the WCS.

The strategic site allocations for example are intended to provide recovery capacity for both municipal and commercial waste. This is explained in Core Policy WCS4 and the supporting text.

It is acknowledged however that the spatial vision could be clarified to emphasise that the strategic site allocations are intended to deal with both commercial and municipal waste and it has therefore been amended to refer to the recovery of residual waste from both of these waste streams.

See Focused Change 10.

Habitat Regulations Assessment (HRA)

European legislation requires the County Council to undertake a Habitat Regulations Assessment (HRA) of the WCS in order to determine whether the policies and proposals are likely to have a significant effect on the integrity of any 'Natura 2000' sites. These are sites which are of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within the European Union. There are several Natura 2000 sites in and near Gloucestershire including Rodborough Common, the Cotswold Beechwoods and the Severn Estuary.

The first stage in the HRA process is to carry out a 'screening' exercise. This helps determine whether policies or proposals are likely to have a significant impact. If there will definitely be no significant impact it is safe to proceed, however if it is uncertain or it is likely that there would be a significant impact, a further more detailed assessment is required known as an 'appropriate assessment' (AA).

In accordance with legislative requirements, the Council has subjected the WCS to HRA throughout its preparation. The early site options and preferred options stages showed largely no significant effects but identified a number of uncertainties. At site options, a number of likely significant effects and uncertainties were identified necessitating further assessment. The Council therefore appointed independent consultants to prepare a Habitat Regulations Assessment report of the publication WCS.

The HRA report was published alongside the WCS and assesses the 13 sites considered at site options in order to determine whether they are likely to have a significant effect on any Natura 2000 site having regard to air pollution, water pollution and bird disturbance. The assessment concludes that for non-thermal waste recovery (e.g. MBT) there would be no likely significant effect from any of the 13 site options. For thermal facilities (e.g. incineration) it concludes that at certain parameters (e.g. at a certain facility size or stack height) for some sites it cannot be concluded that there would be no likely significant impact. This means that for those sites, if a detailed planning proposal comes forward, a detailed assessment of potential impact would be required before planning permission could be granted.

Comments on the HRA report were received from a number of respondents including the Environment Agency (EA) and Natural England who are the statutory agencies in relation to such matters. In their initial response the EA stated that they had no objections to the HRA report. The response from the EA air quality unit raised a number of technical issues but concluded in broad terms that the HRA report is acceptable as a high-level instrument to guide the preparation of the WCS. Should a detailed proposal come forward the EA advises that a more detailed site-specific assessment will be required.

Natural England has also raised a number of technical issues although like the EA recognise that the HRA report is a high-level assessment only and that such issues can be addressed through a more detailed assessment at the planning application stage.

Council's Response

In line with legislative requirements the Council has subjected the WCS to HRA throughout its preparation including issues and options, preferred options, site options and publication.

These various assessments recognise that whilst there could potentially be a significant impact on a Natura 2000 site, this is highly uncertain because we do not know at this stage what type or scale of waste facility will come forward. If for example a non-thermal process came forward e.g. MBT, there would probably be no impact. If however a thermal process came forward e.g. incineration, gasification there may be an impact if the proposal was of a certain size and scale.

It is however only at the planning application stage when the details of a proposal are known that the potential impact on European sites can be accurately assessed and mitigated if necessary. The Council will therefore expect any planning application for the strategic site allocations to address the issue of HRA. This is clearly identified as a requirement in the general development criteria attached at Appendix 5 of the WCS.

In light of the above, no changes to the WCS are proposed.

However, there is one area of the HRA report where it is acknowledged that further clarification is required. In particular, Natural England has highlighted a potential weakness in the HRA report where the same stack diameter had been assumed for plants of different capacities. The Council acknowledges that this approach is incorrect and may have led to impacts at sensitive habitats being underestimated.

Consequently, the consultants responsible for preparing the HRA report were asked to undertake additional modelling with a different stack dimension to confirm the likely influence of changing this parameter.

This additional modelling run has now been undertaken and the consultants have concluded that at most there would be a variation in the order of 2% of the annual mean impact which will have no material bearing on the findings of the assessment. As such, no amendment to the HRA report is considered necessary. A further explanatory statement has however been made available as part of the focused changes documentation for information.

Detailed responses to the issues raised by Natural England and the Environment Agency are set out in the response schedule available separately. In general terms, the Council welcomes the recognition from both Natural England and the Environment Agency that the HRA report is a high-level assessment with limitations that will need to be addressed should a detailed proposal come forward.

Composting Requirements

The publication WCS sets out the position in relation to composting in Gloucestershire. It explains in paragraph 2.46 that there is already a good level of composting capacity available (113,000 tonnes/year) and that as such there is a modest additional requirement of around 9,000 tonnes/year.

In light of this requirement and taking account of previous stakeholder comments, Core Policy WCS2 adopts a criteria-based approach allowing for new or expanded composting facilities to come forward in appropriate locations.

A number of responses have been raised in relation to the issue of composting. We have already discussed the 60% recycling/composting target (see above). Other issues raised include the fact that paragraph 2.46 is factually incorrect in identifying the total amount of composting capacity at 113,000 tonnes/year.

Some respondents have asked for greater clarity in relation to the different types of composting capacity available (i.e. IVC or windrow) and also how much of this capacity is available to manage the different waste streams (i.e. municipal and commercial).

It has also been argued that the WCS should separate future composting and Anaerobic Digestion (AD) requirements on the basis that whilst AD and IVC can manage food waste and green waste either mixed together or separately, windrow composting is only suitable for green waste. It would therefore be inaccurate to assume existing windrow composting capacity is available for managing food waste.

Council's Response

It is acknowledged that paragraph 2.46 is factually incorrect. It is also acknowledged that the WCS could usefully provide some additional detail in relation to the type of existing composting capacity available and what proportion of that capacity is available to manage the municipal and commercial waste streams (although this information is already set out in the Waste Data Paper Update 2010).

Paragraph 2.46 has therefore been amended to correct the total composting capacity figure, to breakdown how much capacity is IVC and how much is windrow and to explain what proportion is used for municipal and commercial waste. It also reflects the planning permission issued in May 2011 for IVC at the Park (35,000 tonnes/year).

See Focused Change 5.

In relation to the separation of composting and AD, the differences between the two processes are acknowledged and Core Policy WCS2 has been amended to exclude AD which is now dealt with through a new core policy and supporting text.

See Focused Change 13.

For information the following tables have been made available in support of the Waste Data Paper Update (2010).

C&I Composting / Biowaste Capacity			
Green Waste - Windrow		IVC / AD	
Facility	Capacity	Facility	Capacity
Sunhill	10,000 tpa	New Earth Solutions*	24,000 tpa
Bradley farm	1,100 tpa	The Park (Permitted by not operational)	35,000
	TOTAL = 11,100 tpa		TOTAL = 59,000 tpa
* The total capacity of this IVC facility is 48,000 tpa. Split 50/50 with MSW & C&I.			

MSW Composting / Biowaste Capacity			
Green Waste - Windrow		IVC / AD	
Facility	Capacity	Facility	Capacity
Wingmoor Farm West	c. 20,000 plus tpa [it is noted that this is an estimate and the capacity could be greater]	New Earth Solutions*	24,000
		Rosehill farm**	30,000
	TOTAL = minimum 20,000 tpa		TOTAL = 54,000 tpa
* The total capacity of this IVC facility is 48,000 tpa. Split 50/50 with MSW & C&I. **it should be noted that the planning permission at Rose Hill Farm also allows for 10,000 tpa of AD (currently			

unimplemented) but only within the current capacity which is currently limited through waste licence to 30,000 tpa. In addition the WDA advise that through service level collection arrangements some of the district council green wastes also go direct for windrow at Rosehill farm.

There is also 5,000 tonnes of capacity for the transfer of MSW food waste from Wingmoor Farm West to IVC and/or AD facilities. Adding this to the MSW composting/biowaste above provides for the current capacity of 79,000 tpa. There is also temporary permission at Hempsted, Gloucester which was not included in the total.

The WDA have also advised that over the last two years around 28,000 tonnes of garden waste has been taken to Wingmoor Farm West which confirms that capacity at that site while difficult to estimate is probably greater than 20,000 tpa estimate.

Overall the current existing capacity is sufficient to meet both green waste and for food waste. Depending on composting performance and service collection arrangements will dictate whether the current capacity will be sufficient and in the right location or whether some new facilities might be required.

The projections suggest that the capacity gap might not be that great in any event, overall there might only be a small capacity gap towards the end of the WCS of around 9,000 tonnes. The table above suggests that the 54,000 tpa of IVC/AD capacity is likely to be sufficient. In relation to meet projected requirements of the WDA for MSW garden waste, from the advice of the operator the current capacity at Wingmoor Farm West should also be more than adequate.

In addition there is also C&I composting/biowaste capacity that could be potentially used for MSW waste requirements subject to contract arrangements. Should any additional capacity required for either windrow/IVC or AD, the criteria based approach in Core Policies WCS2 and WCS3a provide a context and framework for such proposals to be considered.