COMPETITION COMMISSION

Tradebe Environmental Services Limited and Sita UK Limited

A report on the joint venture, Tradebe Healthcare (Holdings) Limited, between Tradebe Environmental Services Limited and Sita UK Limited, relating to the healthcare risk waste sector

28 March 2014

Website: www.competition-commission.org.uk

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The Competition Commission has excluded from this published version of the report information which the Inquiry Group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. Some numbers have been replaced by a range. These are shown in square brackets. Non-sensitive wording is indicated in square brackets.

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Summary

1. On 19 September 2013 a joint venture (JV) company, Tradebe Healthcare (Holdings) Limited (THHL), acquired all the shares in the healthcare risk waste (HRW) businesses of Tradebe Environmental Services Limited (Tradebe) and Sita UK Limited (Sita). Tradebe owns 75 per cent of the JV and Sita 25 per cent.

2. On 29 October 2013, the Office of Fair Trading (OFT) referred the completed joint venture to the Competition Commission (CC) for investigation and report under the Enterprise Act 2002 (the Act). The CC must decide:[1] whether a relevant merger situation has been created; and if so, whether the creation of that situation has resulted, or may be expected to result, in a substantial lessening of competition (SLC) within any market or markets in the UK for goods or services. Our terms of reference are set out in Appendix A.

3. Before the JV, Sita and Tradebe each provided HRW services in various parts of the UK. HRW is a type of waste produced in healthcare and related settings which requires treatment prior to disposal because it is potentially infectious or could otherwise be harmful to health. The main producer of HRW is the NHS (in particular acute hospitals and GP surgeries). The private healthcare sector and other health related activities also produce HRW and small amounts may also be produced in other settings. Producers are categorized as Large Quantity Generators (LQGs) or Small Quantity Generators (SQGs) according to the volume of waste produced at single sites. Most LQGs are NHS hospitals. SQGs generate small amounts of waste at each site but in some cases NHS organizations procure HRW services collectively for multiple SQGs and these contracts can be for large volumes of HRW.

4. HRW services include the collection, transport, treatment and disposal of HRW (as well as ancillary services particularly related to compliance and training in those functions). The different waste volumes of SQGs and LQGs result in differing collection requirements, particularly in frequency of collection, size of vehicle and the need for contingency arrangements. HRW collections from LQG customers are usually made daily in bulk using large trucks. The vehicle is usually filled in a single collection. Collections from SQGs are less frequent and are made with vans that collect HRW from several locations on a collection round.

5. There are two types of treatment technology for HRW, namely high-temperature (HT) treatment, which uses incineration or pyrolysis to treat the HRW, and alternative technology (AT) treatment which uses a number of different techniques to make the HRW safe prior to disposal. Some HRW, such as anatomical waste, is required to receive HT treatment.

6. We concluded that the transaction has resulted in the creation of a relevant merger situation and that we have the jurisdiction to consider whether the creation of that situation may be expected to result in an SLC within any market or markets in the UK for goods or services.

7. We assessed the counterfactual. We have not received any evidence that the Sita HRW business (Sita HRW) would have exited the market in the foreseeable future. Although the business was loss-making, it had some value, particularly given its HT plant capacity. We concluded that the most likely counterfactual is that Sita would have sold the HRW business to a third party, in particular because a credible third party had recently expressed an interest in purchasing the business.

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[1] Under section 35 of the Act.

8. We assessed the appropriate relevant market within which to assess the competitive effects of the JV. We concluded that the product market is the market for the collection, treatment and disposal of HRW for *(a)* LQGs and *(b)* SQGs. The services supplied in this market are AT and HT waste collection and treatment. We concluded that this product market definition would satisfy the hypothetical monopolist test. Based on our assessment of the competitive effects of the merger, we concluded that the relevant geographic markets, where the effect of the merger would be strongest for LQGs and SQGs, were the areas of 50 miles around Birmingham and a further smaller area around Gloucester (see paragraph 9).

9. In our assessment of the competitive effects of the merger we first considered the nature and extent of pre-merger competition. Based on information regarding the effective catchment area of plants, the customer portfolio of the merger parties and an analysis of bids made in tenders we concluded that the overlaps between the merger parties where the effect of the merger would be strongest were the areas of 50 miles around Birmingham and a further smaller area around Gloucester, extending part way to Bristol.

10. SRCL has a strong position in both areas and Sita HRW and Tradebe HRW supply most of the remaining customers not supplied by SRCL. GW Butler exercised only a limited constraint in the central part of the Birmingham area and did not compete effectively in Gloucester. Grundon was also unlikely to exert a strong competitive constraint in the Birmingham and Gloucester areas. We found that other competitors, including collection-only companies (for LQGs) did not compete strongly in these areas. A key factor is the distance of each competitor's plants from its customers because of the importance of distance on transport costs, which form a large component of total cost. SRCL, Sita HRW and Tradebe HRW were usually better placed than other competitors in these areas because they usually had treatment plants closer to customers.

11. We examined data regarding suppliers' bids for specific customers. This data showed that both parties bid in the Birmingham and Gloucester areas. There were no examples of customers switching between the merger parties following a tender and only two examples where the parties ranked one and two in a tender, but these were both outside the relevant geographic markets. Our analysis showed that SRCL won the greatest number and value of tenders. We concluded that SRCL acted as a strong competitor to the merger parties in the pre-merger situation and competed with each merger party substantially more effectively than the merger parties competed with each other.

12. We then assessed the effects of the merger against the competitive position in our counterfactual (where Sita sold its HRW business to a third party).

13. The merger parties had claimed that there would be efficiencies that would result from the merger, largely based on the internalization of HT waste flows. We assessed whether these efficiencies could be expected to enhance rivalry and concluded they would be rivalry enhancing since they were variable cost efficiencies that were timely, likely and sufficient to impact on competition. We also considered that they were merger specific and unlikely to be achieved in other ways.

14. We assessed the supply costs of different suppliers to evaluate their relative competitiveness in the area of 50 miles around Birmingham. This assessment was not meant to predict accurately the outcome of particular tenders but to generate insights into how the merger might affect competition. The assessment, in which prices were set on the basis of the average costs of suppliers, did not identify any cases where Tradebe HRW and Sita HRW separately would be the two most competitive bidders

and indicated that the most effective constraint on the behaviour of the JV was SRCL: SRCL was always either the most competitive or the second most competitive bidder. We found that competitors to the JV, other than SRCL were unlikely to exert significant pressure on the JV due to higher costs. We also assessed the impact of suppliers bidding below their average cost. The results showed that Tradebe HRW and Sita HRW were more competitive than in the average cost assessment but did not indicate clearly an adverse effect from the merger. We did not think it was realistic to assume that bidding below average cost would be the normal bidding strategy for suppliers however.

15. Our assessment suggested that the efficiencies generated by the merger would reduce the JV's supply costs in the area of 50 miles around Birmingham compared with those of Tradebe HRW and Sita HRW. We found that the efficiencies were timely, likely and sufficient to prevent an SLC from arising. We also found that the efficiencies were merger specific. In some cases, where Tradebe HRW or Sita HRW was already the lowest cost competitor, the efficiency benefits resulting from the merger would be retained by the JV and customers would not benefit. However in the majority of cases we found that customers would benefit through lower prices because the JV would be able to bid to undercut the existing supplier (in all cases SRCL) to win the customer. The JV would benefit because it would retain the difference between the price it had to bid to undercut the existing supplier and the level of its reduced costs. It would only gain these benefits by winning customers. There would also be a number of cases where, as a result of the merger, SRCL would have to bid lower to retain the customer and customers would again benefit through lower prices. Customers in the overlap areas would benefit because not only is SRCL likely to constrain effectively the JV post-merger, but the JV will also be a more effective constraint on SRCL. We estimated that about two-thirds of the value of the efficiencies created by the merger in the area of 50 miles around Birmingham would be passed through to customers and one-third retained by the JV.

16. We noted that the merger would reduce the number of effective competitors in the relevant geographic market from three to two, at least over the short-to-medium term. SRCL's market share in this area is approximately [60–70] per cent and the combined market share of the merger parties is around [30–40] per cent. We would usually be extremely concerned about the effect on competition and choice of a three-to-two merger (although we recognize that in this market the location of suppliers relative to the customer is a key factor that affects their competitiveness). We found there were two important factors that alleviated our concerns. The first of these factors was the strength of SRCL as a competitor to the JV. As noted in paragraph 11, we only identified two cases where Tradebe HRW and Sita HRW were the two lowest-price bidders (but these were both outside the relevant geographic market) and we did not identify any cases where a customer switched between Tradebe HRW and Sita HRW. As a result, we did not predict any increases in price due to the merger.

17. We recognized that an alternative owner in the counterfactual might improve the efficiency of Sita HRW to make it more competitive. However, the second factor that alleviated our concerns is that our assessment suggested that the efficiencies generated by the merger would be rivalry-enhancing and in many cases a share of these benefits will be passed through to customers when they retender for HRW services. Our assessment suggested that the efficiencies generated by the merger will have a significant impact on the ability of the parties to bid competitively in future tenders in the area of 50 miles around Birmingham and will be rivalry-enhancing, and that the overall effect of the merger efficiencies would be to reduce average customer prices by over 5 per cent in the area.

18. We found there appeared to be adequate capacity within the JV to allow it to re-distribute waste flows to increase its competitiveness and to compete more strongly with SRCL in the relevant geographic markets. We also considered customer comments about the merger and noted that the weight of customer opinion suggested that the impact of the merger would be broadly neutral.

19. We examined the impact of the merger on SQGs separately. We found the combined SQG market share of the merger parties was low in the overlap areas and unilateral effects were unlikely to arise. We examined the impact on collection-only companies to assess whether there was a risk of foreclosure as a result of the JV. We concluded that SQGs have a range of alternatives to the JV to treat waste in the area of overlap and there will not be a strong incentive to foreclose collection-only companies as a result of the JV.

20. We examined the possibility of coordinated effects occurring as a result of the merger. We did not receive any evidence to suggest that coordination is occurring or likely to occur as a result of the merger. We considered the characteristics of the market were unlikely to be conducive to coordination and concluded that coordinated effects were unlikely to occur as a result of the merger.

21. We assessed countervailing factors and concluded that entry or expansion in the relevant geographic markets would not be timely, likely or sufficient to constrain any potential adverse effects of the JV on supply of HRW services in these areas. Customers have limited ability to threaten to switch post-merger. They also have limited ability to impose costs on suppliers (such as by delaying purchases or credibly threatening to stop buying other services from the supplier). Finally there are limited prospects for new entry facilitated by consortia in the relevant geographic markets. Therefore we concluded that buyer power (beyond the buyer power already built in to the bidding process which ensures that a proportion of efficiency savings are passed on to customers) is unlikely to act as a countervailing factor that would mitigate any adverse effects of the JV for LQG customers in the relevant geographic markets.

22. We concluded that due to the strong position of SRCL, the significant merger-specific efficiencies which are likely to result in significant price reductions in relevant geographic markets, and the fact that while the merger parties regularly bid in the same tenders, they did not constrain each other's pricing to a significant extent, the JV would not be likely to give rise to an SLC in any market in the UK.

Findings

1. The reference

1.1 On 29 October 2013, the OFT referred the completed joint venture between Tradebe and Sita to the CC for investigation and report under the Act.

1.2 The CC must decide:[2]

(a) whether a relevant merger situation has been created; and

(b) if so, whether the creation of that situation has resulted, or may be expected to result, in an SLC within any market or markets in the UK for goods or services.

1.3 Our terms of reference are set out in Appendix A.

1.4 This document, together with its appendices, constitutes our findings. Further information relevant to this inquiry, including a non-confidential version of the main parties' initial submissions and summaries of hearing evidence, can be found on our website.

2. Industry background and the companies

Healthcare risk waste

2.1 Waste produced in healthcare and related settings can be divided into different categories:

(a) *HRW* which requires treatment prior to disposal[3] because it is potentially infectious or could otherwise be harmful to health. HRW includes syringes (or 'sharps'), dressings, medicines, plastic tubing, anatomical waste and some low-level radioactive waste;

(b) *offensive waste* which includes soiled nappies, sanitary waste and incontinence pads from non-infectious patients and generally does not require treatment but must be disposed of in deep landfill or a municipal incinerator; and

(c) *other waste* which includes domestic (or municipal) waste that is suitable for disposal at landfill without further treatment, and confidential waste.

2.2 HRW services include the collection, transport, treatment and disposal of HRW (as well as ancillary services particularly related to compliance and training in those functions).

2.3 The Environment Agency (EA) collects data from hazardous waste movements in England which it uses in three ways: it reports to Government as part of a European reporting duty; it publishes data; and it uses data to inform its risk-based regulatory approach. Hazardous waste is classified in accordance with the List of Waste

[2] Under section 35 of the Act.
[3] This definition was also used in the 2012 CC investigation into the completed acquisition by Stericycle, Inc of Ecowaste Southwest Limited.

(England) Regulations 2005. Total movements of chapter 18 healthcare waste[4] in the UK amounted to 184,718 tonnes in 2012.[5]

Healthcare risk waste producers

2.4 Producers (or generators) of HRW include various NHS organizations (eg acute hospitals and GP surgeries), the private healthcare sector, nursing homes, dentists, pharmacies, veterinary clinics, pharmaceutical companies and tattoo parlours. Much smaller volumes of HRW may arise in other settings such as hotels, shops and offices. There are over 50,000 production points in the UK for HRW with a total estimated annual expenditure on HRW services in excess of £125 million.

2.5 The amount and type of HRW varies according to the type of producer. Acute hospitals produce large volumes of HRW (typically between 100 and 600 tonnes a year),[6] as well as offensive and other waste that is suitable for disposal direct to landfill without treatment. Other producers of HRW such as GP surgeries, pharmacies and dentists produce only small volumes of HRW.

2.6 Producers can be categorized as LQGs or SQGs according to their volume of waste production at individual sites. The majority of LQGs are NHS hospitals. For the purposes of our analysis, SQGs means all generators of HRW which are not NHS acute hospitals, private hospitals, or facilities management companies procuring HRW services on behalf of LQGs. They are a heterogeneous group of customers which includes: pharmacies, GP practices, dentists, care homes, laboratories, tattoo parlours, etc. Their common characteristic is that they generate small quantities of HRW at individual sites.

2.7 The different waste volumes of SQGs and LQGs result in differing collection requirements, particularly in frequency of collection, size of vehicle and the need for contingency arrangements (eg in the event of bad weather or plant failure) as LQGs generally have little ability to store waste, even for a short time, if it is not collected.

2.8 Producers also differ in their purchasing arrangements for HRW services. Government bodies, including some NHS organizations, are obliged by law to put their contracts out to tender through a transparent and formal process if the contract value exceeds the relevant threshold (currently £73,934[7]).

2.9 Procurement of HRW services in the NHS may take place in several ways:

(a) individual NHS organizations may procure their own HRW services;

(b) consortia of NHS organizations may jointly procure HRW services;

(c) PFI contractors (such as Skanska, ISS and Serco) may procure HRW services for NHS organizations operating under PFI arrangements; or

(d) commissioning bodies[8] may procure HRW services on behalf of NHS organizations providing primary care services. Although these contracts can

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[4]Healthcare waste (chapter 18) is defined as 'wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)' and relates to the waste categorized in paragraphs 2.1*(a)* and 2.1*(b)*.
[5] England and Wales Hazardous waste 2012, www.environment-agency.gov.uk/research/library/data/150326.aspx.
[6] Each bed generates around 0.8 tonnes of waste.
[7] www.ojec.com/Threshholds.aspx.
[8] Under the Health and Social Care Act 2012, Primary Care Trusts (PCTs), which previously had responsibility for commissioning primary care (such as GP services) and acute hospital services, were abolished and replaced by Clinical Commissioning

cover a large number of GP surgeries and therefore be high in value, because the volume of waste generated at each site is relatively low, these are generally classified as SQG contracts.

2.10 SRCL told us that it expected to see a move towards bigger consortia with procurement bodies becoming increasingly involved in the procurement of these contracts and we found a number of examples of procurement of HRW services through consortia of NHS organizations including the Yorkshire consortium (23 NHS organizations) and the Northern Clinical Waste consortium (14 NHS organizations and one university).

2.11 We understand that smaller individual SQGs will generally negotiate prices with one or two suppliers and enter into informal arrangements for the supply of services.

Treatment of healthcare risk waste

2.12 There are two distinct types of treatment technology for HRW, namely HT (or incineration) and AT treatment. Within each of these treatment types there are a number of different processes.

2.13 HT treatment encompasses conventional oxidation-type incinerators, which burn waste material at temperatures in excess of 850°C (1,000°C for the most hazardous materials), as well as pyrolysis plants, which incinerate waste material in the absence of oxygen at temperatures between 600°C and 1,000°C.

2.14 AT treatment includes a variety of methods for rendering HRW safe prior to disposal:

(a) Dry heat augers use gas or electricity to heat a process fluid, such as oil, which is circulated around the HRW (eg around the walls of the chamber through which the waste is passed: it is used to transfer the heat and does not mix with the waste). The heat deactivates pathogenic micro-organisms, most of which are rapidly inactivated at 60ºC to 80°C.

(b) Steam augers are another form of heat-based treatment. The difference from dry heat systems is that the steam is injected directly into the waste as well as used to heat the walls of the treatment chamber.

(c) Autoclaves also use steam but, in addition, the pressure in the treatment chamber is increased during the treatment process. When the temperature and pressure have reached the required conditions, the waste is held for a specified period before being discharged.

(d) Microwaves use microwave energy to generate the heat that is used to treat the HRW.

(e) Chemical treatment systems use disinfectants, such as sodium hypochlorite and chlorine, to treat the waste. Chemical treatment differs from the other treatment systems outlined above in that it does not use heat.

(f) Irradiation systems use gamma radiation to render HRW safe, but can only be used for small quantities.

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Groups (CCGs) from 1 April 2013. From this date, NHS England assumed responsibility for commissioning primary care services, including contracts for the treatment and disposal of HRW. We understand that this is generally discharged through NHS England's 27 local area teams. In addition, responsibility for improving the health of local communities transferred to local authorities from this date (including contracts for the treatment and disposal of any HRW generated from these activities).

2.15 Following either HT or AT treatments, there is a residue to be disposed of. In the case of HT treatments this is ash; and in the case of AT, where waste is shredded prior to treatment, it is known as 'flock'. In both cases, this end-product is generally sent to landfill for disposal (although flock can also be recycled in certain industrial processes). Incinerator ash must go to landfills authorized to accept hazardous waste, while flock can go to non-hazardous landfill provided that it does not contain treated sharps. The nature of AT treatments means that flock volumes are considerably larger than ash volumes from incinerators.

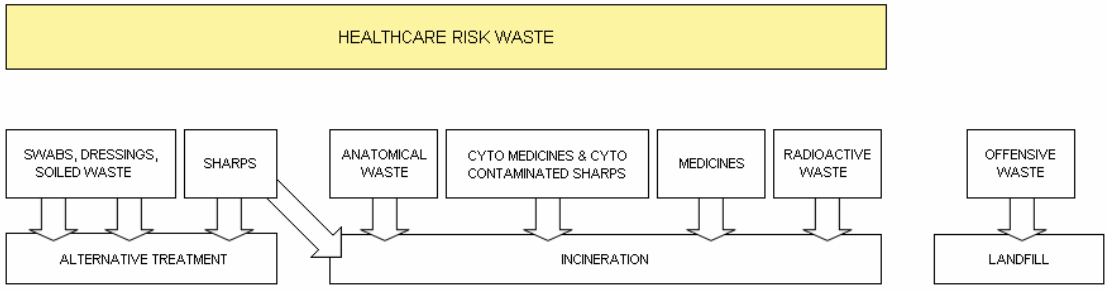
2.16 Landfill Tax was introduced in October 1996 and is incurred on end-products sent to landfill for disposal. The standard rate will increase to £80 per tonne in April 2014.[9] A number of parties told us that increases in landfill taxes were generally passed on to customers through price increases, [✂].

2.17 There has been a trend away from HT to AT treatment since the mid-1990s, because tougher emissions standards were introduced with which new incinerators must comply. The planning requirements for incinerators are also more onerous than for AT treatment plants. The regulatory regime requires certain types of HRW to be subject to HT treatment.[10] Typically between 7 and 20 per cent of a hospital's HRW must receive HT treatment.

2.18 Figure 1 identifies different types of HRW and their required form of treatment.

FIGURE 1

HRW and treatment requirements



Source: CC analysis.
Note: For sharps, in England and Wales, no medicinally contaminated sharps may go to AT. However, in Scotland and Northern Ireland, sharps that are fully discharged (other than cytotoxic and cytostatic) may go to AT. For swabs, dressings and soiled waste, only infectious material requires treatment. Material that has been clinically assessed and found not to be infectious may be sent direct to landfill.

2.19 Substantial volumes of HRW that could be sent to AT treatment plants receive HT treatment, either because of the relative proximity of the plant to the waste producer, to bulk out difficult-to-burn waste,[11] to ensure utilization of available capacity or because AT plants are off line for repairs and maintenance.

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[9] The Budget 2010 announced that the standard rate of Landfill Tax would increase by £8 per tonne each year from 1 April 2011 until at least 2014 and that the rate will not fall below £80 per tonne from 2014/15 to 2019/20. http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_ShowContent&id=HMCE_CL_000509&propertyType=document.
[10] This includes anatomical waste, pharmaceutical and cytotoxic (from certain drugs used in the treatment of cancers) wastes, medicinally contaminated sharps and waste suspected of being contaminated with certain pathogens.
[11] A high proportion of waste that is required to be subject to HT is plastic. Incinerators will overheat if they burn exclusively plastic materials. Veolia told us that it tried to ensure that a maximum of [✂] per cent of its waste to be incinerated was HT-only waste.

2.20 In recent years the amount of HRW produced has remained broadly constant although there has been a focus on segregation and diversion of waste into the offensive waste stream, both of which have reduced the volume of waste suitable for AT. SRCL said it was seeing an increase in the offensive waste stream with a corresponding reduction in waste requiring AT or HT treatment.

2.21 Table 1 summarizes details of HRW treatment plants in Great Britain and shows whether the operator is a treatment-only or an integrated collection and treatment company.

TABLE 1 **Summary of HRW treatment plants in Great Britain as at 14 January 2014**

Operator	*Type of company*	*No of AT plants*	*AT tonnage processed**	*No of HT plants*	*HT tonnage incinerated**
SRCL	Integrated	6	[✂]	9	[✂]
Sita HRW	Integrated	3	[✂]	3	[✂]
Grundon	Integrated	1	[✂]	1	[✂]
Tradebe HRW	Integrated	3	[✂]	-†	[✂]
HES	Integrated	2	[✂]	-	[✂]
GW Butler	Integrated	3	[✂]	-	[✂]
Novus	Integrated	1	[✂]	-	[✂]
Medisort	Integrated	1	[✂]	-	[✂]
Peake	Integrated	-	[✂]	1	[✂]
Veolia	Treatment only	-	[✂]	1	[✂]
Augean	Treatment only	-		1	[✂]
Viridor	Integrated	-	[✂]	1	[✂]
Addenbrookes	NHS (treatment only)	-	[✂]	1	[✂]
New Cross	NHS (treatment only)			1	[✂]
Total		20	[✂]	19	[✂]

Source: The EA, Scottish Environment Protection agency, Natural Resources Wales data from the parties and competitors.

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*Tonnage processed/incinerated figures relate to 2012 for all plants in England and Wales and 2011 for plants in Scotland (Healthcare Environmental Services (HES) has an AT plant and SRCL has an AT plant in Scotland).
†Tradebe Fawley Limited, a member of the wider Tradebe group, has an HT plant at Fawley, Hampshire which is licensed by the EA for the treatment of HRW but which primarily treats high-value hazardous industrial waste and high-grade radioactive waste and only treated limited volumes of HRW in 2012 ([50–200] tonnes).
‡[✂]
Note: The SRCL treatment plant in Merseyside and the Clinipower treatment plant in Avonmouth detailed in Appendix G are not included in the table above as they are not yet operational.

The regulatory framework for handling and disposing of healthcare risk waste

2.22 The detailed regulatory requirements for HRW are brought together in a Department of Health publication entitled 'Safe Management of Healthcare Waste' which was updated and published in March 2013. The main requirements are summarized in Appendix B. The emphasis of recent regulatory guidance has been on more effective segregation of waste to reduce the volume of HRW requiring treatment.

Suppliers of healthcare risk waste services

2.23 HRW services are purchased by HRW producers. Suppliers of HRW services can be divided into:

(a) integrated collection and treatment companies (such as Tradebe HRW and Sita HRW);

(b) treatment-only companies which receive HRW from third parties and treat it to make it safe for disposal; and

(c) collection-only companies which collect the HRW but subcontract treatment to a company that operates a treatment plant.

2.24 Collection-only companies can be customers of treatment companies and both customers and competitors of integrated collection and treatment companies. Tradebe told us that it did not consider collection-only companies to be major competitors for LQGs but believed collection-only companies did compete for SQGs.

2.25 If an integrated collection and treatment company does not operate an HT treatment plant it may be both a customer and a competitor of another integrated company which does operate an HT treatment plant.

Transport

2.26 The challenges associated with collecting waste and transporting it to treatment plants are a significant determinant of the behaviour of suppliers of HRW services.

2.27 The large quantity of waste and high frequency of collection for LQGs means that it is desirable to have a large vehicle travelling a short distance to the treatment plant. Given the amount of waste produced by LQGs, it is usually possible to fill a large vehicle in a single collection. The vehicles used for collection purposes typically carry around 1.5 to 2 tonnes and collect waste daily.[12] For SQGs the need to collect a large number of smaller quantities of waste infrequently from geographically dispersed sites means that collections are typically made in vans (with an approximate capacity of 0.5 tonnes) making multiples stops and collecting small quantities of HRW in bags from each location.

2.28 Companies may utilize transfer stations in order to aggregate HRW and transfer it to a larger vehicle in order to reduce the total cost of transport to a treatment plant. There may also be significant costs associated with the secondary transportation of HRW requiring HT treatment to a second treatment plant if the HRW is initially transported to an AT plant.[13]

The merger parties

Tradebe HRW

Ownership and structure

2.29 Tradebe's ultimate parent company is Grupo Tradebe Medioambiente, SL, a company registered in Spain. The Tradebe group provides waste management services, primarily in Spain, the USA and the UK. Tradebe started its UK HRW business in 2010 with the acquisition of Britcare Limited.

2.30 Prior to the merger Tradebe provided integrated collection and treatment HRW services across England and Wales through two wholly-owned subsidiaries. Tradebe contributed all the shares of these two subsidiaries to the JV:

(a) Tradebe Healthcare Limited operates the AT treatment plants at Doncaster and Yardley Green, Birmingham. It was acquired by Tradebe on 30 November 2010. Prior to its acquisition by Tradebe this company was named Britcare Limited and was privately owned.

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[12] Waste is usually collected in large 770-litre bins and trucks carry between 15 and 42 bins.
[13] Depending on the location of the HT plant used the HT waste could be transported for substantial distances.

(b) *Tradebe Healthcare (Southwest) Limited* operates an AT treatment plant at Avonmouth. It was previously named Ecowaste Southwest Limited and was acquired by SRCL Limited in January 2011 but was then acquired by Tradebe in August 2012 following a CC inquiry.[14]

2.31 Tradebe HRW generated the majority of its revenues from HRW services provided to LQGs, but also had some SQGs. Its customers were primarily situated in the Doncaster, Birmingham and Bristol areas.

2.32 Tradebe's objective for Tradebe HRW was to consolidate through acquisition and to [✂]. Tradebe had also been pursuing a programme of [✂] and seeking to grow its HRW business [✂].

Treatment plants

2.33 Tradebe HRW operated three AT plants: Doncaster; Avonmouth and Yardley Green, Birmingham. These plants have a combined operational capacity for the treatment of HRW of [15,000–20,000] tonnes, as set out in Table 2.

TABLE 2 **Tradebe HRW's treatment plants**

Plant	*Type*	*Operational capacity tonnes*
Avonmouth	AT	[3,000–4,000]
Birmingham (Yardley Green)	AT	[10,000–15,000]
Doncaster	AT	[3,000–4,000]
Total		[15,000–20,000]

Source: Merger parties.

2.34 Tradebe also operates an HT plant at Fawley, Hampshire which is licensed by the EA for the treatment of HRW but which primarily treats high-value hazardous industrial waste and high-grade radioactive waste.[15] Fawley only treated a small volume of HRW in 2012 ([50–200] tonnes). This plant is not part of the JV, but Tradebe is testing whether HT waste can be burnt at the plant and its internal documents indicate some synergies for the JV by diverting to Fawley HT waste which is currently either treated by a third party or at Sita HRW's plants at Redditch, Salford and Wrexham, reducing transportation costs or third party incineration costs.

Financial performance of Tradebe HRW

2.35 Tradebe's financial reporting separates Tradebe HRW into Tradebe Healthcare (Southwest) Limited and Tradebe Healthcare Limited. Tradebe told us that the Tradebe Healthcare Limited business had been affected by the general market trend of declining market prices resulting in contracts being renewed at lower prices and margins. However, both companies made profits in 2011 and 2012 with Tradebe Healthcare (Southwest) Limited generating higher profit margins. Both companies had positive net assets. Further details are provided in Appendix C.

[14] Completed acquisition by Stericycle, Inc of Ecowaste Southwest Limited.
[15] Fawley is not owned by Tradebe HRW but there may be benefits for Tradebe HRW and/or Tradebe if Fawley is used to treat HRW.

Sita HRW

Ownership and structure

2.36 Sita is the UK waste management business of GDF Suez SA, a company incorporated in France. GDF Suez SA is a multinational company primarily providing power, natural gas and energy services. Prior to the merger Sita provided HRW services through its wholly-owned subsidiary, SITA Healthcare Limited.

2.37 Prior to 6 March 2013, SITA Healthcare Limited was called Polkacrest Limited (Polkacrest). Polkacrest was established in the South-East as a private business during the 1980s. It began as a general waste management company, with a bulk haulage capability, collecting domestic, industrial and clinical waste. The company also established in-house disposal capability.[16] London Waste Limited, a company jointly controlled by Sita and North London Waste Authority,[17] acquired Polkacrest in the 1990s. On 22 December 2009, the entire share capital of Polkacrest was acquired by Sita as part of a transaction where Sita divested its share of London Waste Limited, after which Polkacrest traded as SITA Healthcare Limited.

2.38 Sita contributed all the shares of SITA Healthcare Limited into the JV, including SITA Healthcare Limited's three wholly-owned subsidiaries: Polkacrest Northwest Limited; Polkacrest Midlands Limited; and Polkacrest Wales Limited, which we collectively refer to as Sita HRW.

2.39 Sita HRW generated the majority of its revenues from HRW services provided to LQGs. Sita HRW also had some SQG customers. Sita HRW's customers were primarily situated in the North of Wales and Manchester, Birmingham, Buckinghamshire, Oxfordshire and London areas.

Treatment plants

2.40 Sita HRW operated six plants at: Rochester (AT), Chase Farm (Enfield—AT), Wrexham (AT and HT), Salford (HT) and Redditch (HT). These have a combined total operational capacity for the treatment of HRW of [40,000–45,000] tonnes, as set out in Table 3. Nearly two-thirds of the Sita HRW capacity is HT capacity. Total Sita HRW treatment capacity is over twice that of Tradebe HRW. Sita HRW also operated a truck depot at Sevenoaks, Kent.

TABLE 3 **Sita HRW's treatment plants**

Plant	*Type*	*Operational capacity tonnes*
Enfield (Chase Farm)	AT	[3,000–4,000]
Rochester	AT	[9,000–10,000]
Wrexham*	AT	[6,000–7,000]
Wrexham	HT	[6,000–7,000]
Redditch	HT	[8,000–9,000]
Salford	HT	[7,000–8,000]
Total		[40,000–45,000]

Source: Merger parties.

*Tradebe told us that the AT facility at Wrexham was closed and staff were made redundant prior to the merger. Tradebe told us that subsequent to this initial closure the plant was reopened to provide temporary capacity due to maintenance at Salford.

[16] www.polkacrest.co.uk/html/about_us_history.html.
[17] North London Waste Authority was established in 1986 and is the statutory waste disposal authority for seven local authorities (Barnet, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest).

Financial performance of Sita HRW services

2.41 Sita HRW's financial performance is detailed in Appendix C. Sita HRW has been loss-making in the last two years. Sita told us that the profitability of its HRW business had reduced as a result of the economic crisis (less tonnage, reductions in pricing to capture/retain tonnages and improvements by customers in sorting their waste thereby reducing the share of high value HRW). It did not provide us with any evidence indicating that this would change.

2.42 The merger parties told us that Sita HRW had lost four significant contracts in 2012/13[18] and that those contracts that Sita HRW has retained have been subject to price reductions. The merger parties also submitted that Sita HRW has not won any significant new contracts in 2013 except a contract with Lewisham and Greenwich NHS Trust (HRW volume of 576 tonnes). Recently, however, Sita HRW has won the NHS Blood and Transport contract which commences in May 2014 and is expected to generate annual revenues of £1 million.

Relevant third party healthcare risk waste suppliers

SRCL

2.43 SRCL is the largest provider of HRW services in the UK. It is a subsidiary of Stericycle Inc, a US corporation and one of North America's largest providers of medical waste services. SRCL was formed by a merger between White Rose Environmental and Sterile Technologies Group Ltd (STG) in 2006 which was the subject of a CC inquiry.[19] There has been one further CC inquiry and one OFT inquiry into SRCL acquisitions.[20] SRCL operates 15 treatment plants in Great Britain: six AT plants (out of 20 in the UK) and nine HT plants (out of 19 in the UK). The next largest competitor (based on the number of plants) is Sita HRW with three AT and three HT plants. SRCL is active in the provision of collection and treatment of HRW for both SQGs and LQGs.

GW Butler

2.44 GW Butler operates three AT plants, each with a capacity of [✂] tonnes per year, in Bradford, Nottingham and East London. It has no HT plant capacity—70 per cent of its HT waste goes to Veolia and the balance goes to Sita HRW, Grundon and other plants. It services LQGs and SQGs.

Grundon

2.45 Grundon operates an HT plant in Slough and an AT plant in Maidenhead with capacities of [✂] and [✂] tonnes a year respectively. It services LQGs and SQGs.

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[18] The Merseyside consortium contract to SRCL in April 2013 (2012 revenues £[✂] million, EBITDA £[✂]); a contract with Sodexho (2012 revenues £490,000, EBITDA £110,000); a contract with Countess of Chester NHS Foundation Trust (2012 revenues £146,000 and EBIT £74,000); and a contract with North Staffordshire Clinical Commissioning Group (2012 revenues £93,000).

[19] This merger was the subject of a CC inquiry, as a result of which the merged entity was required to divest HT plants at Salford and Redditch and an HT plant and AT plant at Wrexham—see Stericycle/STG report.

[20] In 2011 SRCL acquired Ecowaste Southwest, a treatment and collection business based in Avonmouth. Following a CC inquiry SRCL was required to divest Ecowaste Southwest (see SRCL Ecowaste inquiry home page). In April 2009, SRCL acquired Cliniserve Holdings Ltd, which owned healthcare waste treatment plants at Frome and Littlehampton. Following an investigation by the OFT, SRCL divested the Littlehampton plant as an undertaking in lieu of a CC reference (see www.oft.gov.uk/OFTwork/mergers/decisions/2009/SRCL).

Healthcare Environmental Services

2.46 Originally based in Scotland, HES won the Yorkshire consortium tender in 2011. To service this it installed its first plant outside of Scotland in Wakefield. It is an AT plant with a capacity of [✂] tonnes a year and is the largest plant in the UK.

Veolia

2.47 Veolia operates one (HT) plant with a capacity of about [✂] tonnes a year. It is a treatment-only company and the plant has run at [✂] per cent of available capacity in the last three years. [✂]

Collection-only companies

2.48 Collection-only companies do not have treatment facilities. There are both large and small collection-only companies. National collection-only companies include PHS, Initial and Cannon. These are all part of companies offering a wider range of waste management and other services. There are also smaller companies such as Professional Hygiene with regional coverage.

3. The JV and the relevant merger situation

Overview of the merger

3.1 Tradebe told us that in February 2012 the CEO of Sita contacted Tradebe to assess whether Tradebe would be interested in acquiring Sita HRW and Tradebe confirmed its interest. Sita also approached another possible purchaser, Jon Miles,[21] who made an indicative offer for acquiring Sita HRW. Sita only progressed the Tradebe offer which it said was more favourable.

3.2 Tradebe submitted its first indicative offer on [✂] for [✂] per cent of SITA Healthcare Limited for a total value of £[✂] million (a multiple of [✂] times the adjusted recurrent EBITDA (earnings before interest, tax, depreciation and amortization) of [✂]). After due diligence[22] Tradebe issued a second indicative offer on [✂] for [✂] per cent of SITA Healthcare Limited for a total value of £[✂] million.

3.3 Tradebe was aware that Sita HRW's management accounts were showing a declining trend in profits that would depress the valuation of the business below [✂]. In [✂] Sita stated that it was not willing to sell Sita HRW below £[✂] million. To allow the transaction to proceed, Tradebe offered to grant Sita a minority share of a JV combining Sita HRW and Tradebe HRW with a put and call option at [✂] times EBITDA of the JV. This was designed to provide the opportunity for the JV to improve Sita HRW's performance and increase its value.[23] [✂]

3.4 In March 2013 Sita informed Tradebe that Sita HRW had lost the Merseyside consortium contract. Sita's proposed shareholding in the JV was reduced to 25 per cent and a minimum price for the put and call option was set. The Put and Call Option Agreement provides: [✂].

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[21] Mr Miles is an entrepreneur who has owned a number of waste management companies including Polkacrest (prior to selling it to London Waste Limited in 1998) and Verdant (a national municipal services contractor).
[22] Tradebe told us that [✂].
[23] [✂]

3.5 THHL was incorporated on 1 July 2013. On 19 September 2013 THHL acquired all the shares in Sita HRW and Tradebe HRW. Following the merger Tradebe owns 750 shares and Sita 250 shares in the JV.

3.6 Under the JV agreement, [✂] and there are transitional arrangements for Sita to provide certain services to the JV for a limited duration (typically [✂]). There is a subcontracting arrangement where SITA Healthcare Limited sub-contracts collection and disposal of non-hazardous waste generated at hospitals to Sita. If [✂].

Rationale for the merger

3.7 The merger enabled Sita to exit the HRW market. Sita told us that since 2009 the strategy for Sita HRW had been to rely on organic growth through new contract wins, renewals and extensions, improved service quality and optimization of cost structure in collection and treatment. Sita told us that when Sita HRW became loss-making its options were to shut it down, sell it to one or several buyers, or merge it with another HRW business. It said that it was making significant changes to its core business and was not able to provide to Sita HRW significant capital investment or management focus. Sita said that waiting for organic growth (ie new contract wins) was not an option as this would have meant further loss-making periods and HRW acquisitions were not an option as Sita wanted to prioritize investment in its core business.

3.8 Tradebe said that the merger would enable the JV to improve profitability by providing Tradebe HRW with access to in-house HT facilities (using Sita HRW's HT plants), eliminating the margins paid by Tradebe HRW to third parties for HT treatment and improving security of supply. It told us that the prices it paid for HT treatment prior to the merger reduced its competitiveness and were subject to change at short notice.[24] Tradebe also said that the merger would combine complementary geographic facilities, allowing the JV to allocate HRW across plants to reduce transport costs and better use available capacity. It said that the synergies were expected to deliver savings in HT treatment costs of approximately £[✂] a year, including savings from using Fawley to process HRW. Tradebe had also identified savings from [✂].[25] It said that the merger would also allow IT and R&D investment which would increase the JV's competitiveness.

Jurisdiction

3.9 Under section 35(1)(a) of the Act, and pursuant to our terms of reference (see Appendix A), we are required to decide whether a relevant merger situation has been created.

3.10 Section 23 of the Act provides that a relevant merger situation has been created if two or more enterprises have ceased to be distinct within the statutory period for reference and either the share of supply test or the turnover test specified in the Act is satisfied. We are satisfied, and the merger parties agree, that each of the businesses being contributed to the JV by Tradebe and Sita respectively is an enterprise for the purposes of the Act.

3.11 The transaction completed on 19 September 2013. The statutory period within which any reference to the CC must be made expires four months from this date. The reference to the CC was made within this period, namely on 29 October 2013.

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[24] For example, Tradebe told us that in January 2013 [✂] increased the HT prices charged to Tradebe by [✂] per cent on [✂] notice.
[25] Tradebe noted that it might not implement all synergies identified [✂].

3.12 Enterprises will 'cease to be distinct' if they are brought under common ownership or control. Section 26 of the Act allows for a number of types of control[26] including the ability materially to influence the policy of a person ('material influence').

3.13 Tradebe, with its shareholding of 75 per cent in THHL has more than 50 per cent of the voting rights in the JV and therefore enjoys a controlling interest. We have concluded that Tradebe has ceased to be distinct from THHL, including the enterprise contributed to the JV by Sita within the meaning of section 26(1) of the Act.

3.14 The turnover in 2012 of the business contributed to the JV by Tradebe was £5.2 million; the turnover in 2012 of the business contributed to the JV by Sita was £20.6 million (see Appendix C). Therefore the turnover test in section 23(1)(b) of the Act is not met.

3.15 Under section 23 of the Act, the share of supply test is met if, as a result of the transaction, the merged enterprises collectively supply or acquire 25 per cent or more of goods or services of a particular description in the UK or in a substantial part of it. As our merger guidelines explain, share of supply is different from market share, and the goods or services to which the share of supply test is applied need not amount to the market defined for the purpose of economic analysis.[27] For the purpose of deciding whether or not the share of supply test is met we can apply such criteria as we consider appropriate.[28]

3.16 The merger parties have overlapping activities in the Birmingham area in respect of collection, processing and disposal of HRW. As a result of the merger, the share of supply, measured by volume of waste treated within 50 miles of Birmingham increased from [20–30] per cent (Sita) to [30–40] per cent as a result of the merger. The Birmingham area includes a large conurbation with a sizable population. We conclude that the Birmingham area constitutes a substantial part of the UK and the share of supply test is met on the basis of the merger parties' combined share of volume of waste treated in this area. Therefore we have concluded that the transaction has resulted in the creation of a relevant merger situation.

3.17 We also considered whether Sita has 'material influence' over the JV. Our merger guidelines explain that in assessing material influence we will focus on the overall relationship between the acquirer and the target and on the acquirer's ability materially to influence policy relevant to the behaviour of the target in the marketplace. The policy of the target includes its strategic direction and its ability to define and achieve its commercial objectives.[29]

3.18 As discussed in paragraph 3.5, Sita has a shareholding of 25 per cent in the JV. It has the right to appoint two out of five directors. The chairman is appointed by Tradebe and does not have a casting vote. The quorum for directors' meetings is two directors, at least one of whom is nominated by each parent company. Decisions made at any meeting of directors or at any committee of directors shall be decided by a majority of votes.

3.19 A management committee has been established to manage the day-to-day operational aspects of the JV business. This is made up of persons nominated by Tradebe and is expected to operate in a manner consistent with the annual business plan. This must be in a form approved by the Board of directors.

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[26] Section 26 distinguishes between different levels of control: a controlling interest ('de jure' control), ability to control policy ('de facto' control) and the ability materially to influence the policy of a person ('material influence').
[27] *CC2*, September 2010, paragraph 3.3.5.
[28] Section 23(5) of the Act.
[29] *CC2*, paragraph 3.2.8.

3.20 The JV agreement provides that decisions in relation to certain reserved matters cannot be taken by the board, the management committee or shareholders without the prior written approval of each of Tradebe and Sita. Reserved matters include changes to the JV's articles and entering into contracts or committing to expenditure or liability of a capital nature in excess of an amount equivalent to [✂] per cent of the turnover of the JV generated in the previous financial year (when aggregated with other such commitments); this corresponds to a value of approximately £[✂]. We considered that this could be significant in the context of the type of capital expenditure in this industry and may influence strategic decisions on whether the JV bids for certain contracts that require the setting up of new treatment facilities.

3.21 There are transitional arrangements for Sita to provide a wide range of services to the JV (paragraph 3.6); however, we noted that these were intended to be of fairly limited duration, typically [✂].

3.22 In our view, it is likely that at least one Sita director will attend board meetings. First, the JV agreement provides that Tradebe and Sita shall use reasonable endeavours to ensure that any meeting of the board has the requisite quorum. Second, Sita has an interest in ensuring that it maximizes the price it will be paid for its share of the business when it is sold pursuant to the put and call option agreement. In light of their expertise in the HRW business and their seniority, we also consider it likely that the Sita-appointed directors will have the ability to influence the policy of the JV by virtue of their attendance and participation at board meetings.

3.23 Taking into account the overall relationship between Sita and the JV, we conclude that Sita's shareholding in the JV company gives it the ability to exercise material influence. We base this conclusion on Sita's ability to veto certain reserved matters including: *(a)* any changes to the articles of the JV company; and *(b)* capital expenditure in excess of approximately £[✂]. We consider that the latter could be relevant to decisions on whether or not to bid for large contracts which would require investment in new treatment facilities. Other considerations pointing towards material influence include: *(a)* the right of two Sita-appointed directors, who have expertise in the HRW business, to attend and participate at board meetings; *(b)* the right of Sita-appointed directors to be involved in the board's approval of the annual business plan of the JV; and *(c)* the right of Sita-appointed directors to influence the policy of the JV in such a way as to maximize the price that Sita will be paid for selling the remaining 25 per cent of the business to Tradebe pursuant to the put and call option agreement.

3.24 Section 26(3) of the Act gives us discretion to treat persons able to control or materially influence the policy of a body corporate (without having a controlling interest) as having control of it for the purpose of determining whether or not enterprises cease to be distinct. In the circumstances of this merger,[30] we have found that Tradebe's acquisition of 75 per cent of the shares of the JV constitutes a relevant merger situation, and our assessment has focused on whether or not this relevant merger situation has given rise to an SLC. While we found that Sita has the ability to materially influence the policy of the joint venture, Sita has not retained any HRW business and it is not expected that any separate or different adverse competitive effects flow from its interest in the joint venture; the put and call option agreement also provides a clear exit for Sita. As the relevant merger situation created by virtue of Tradebe's controlling interest in the joint venture gives us jurisdiction to assess all likely effects on competition flowing from the transaction, it is not necessary for us to exercise our discretion under section 26(3) to treat Sita's material influence over the policy of the joint venture as amounting to control for the purposes of sections 26(1)

[30] In this report we use the term 'merger' to refer to the transaction that resulted in the creation of the JV company, THHL.

and 26(2) of the Act.[31] We have therefore decided not to exercise our discretion under section 26(3) of the Act.

Conclusion on relevant merger situation

3.25 Based on the discussion above we have concluded that the transaction has resulted in the creation of a relevant merger situation.

4. Counterfactual

4.1 We must decide whether the merger has resulted or may be expected to result in an SLC by considering what would most likely have happened had the merger not taken place. This situation is referred to as the counterfactual. The CC will typically incorporate into the counterfactual only those scenarios that appear likely on the basis of the facts available to it and the extent of its ability to foresee future developments.[32]

4.2 In this section we provide details of the counterfactual. We consider Tradebe's and Sita's HRW businesses separately. For each we assess:

(a) whether either would have exited the market because of their financial (or operational) performance;

(b) if not, whether their ownership would have changed (either through another JV or acquisition by another party); and

(c) if the party remained independent in the market, whether their operations would be likely to have changed substantially.

4.3 We then provide our assessment of the appropriate counterfactual.

Tradebe HRW in the counterfactual

4.4 Tradebe HRW did not have any HT treatment facilities for HRW at the time of the JV (this was part of its rationale for the merger). The merger parties told us[33] that this resulted in substantial cost and security of supply disadvantages for Tradebe HRW. It told us that it was concerned by 'the negative profitability trend' that the HRW business was experiencing and that an acquisition to bring HT capacity in house was its preferred route to managing this trend. It also stated that if this merger had not been possible, [✂].

Profitability and stand-alone viability of Tradebe HRW

4.5 Tradebe HRW's financial performance is detailed in Appendix C. This indicates that it was under no financial pressure at the time of the JV and we have seen no evidence of other reasons that might have forced it to exit the business.

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[31] The existence of control or material influence over policy entitles ('may') but does not oblige the CC to conclude that there is common control for the purposes of sections 26(1) and 26(2). Thus, where the CC has properly found there to be an influence over policy, it must then consider whether that should lead to the conclusion that there is control for the purposes of sections 26(1) and 26(2). See *Eurotunnel v Competition Commission* [2013] CAT 30 at [90].
[32] *CC2*, paragraph 4.3.6.
[33] Initial submission, paragraph 4.1.

Operational changes

4.6 Tradebe has a plant at Fawley which has recently had [✂] which would allow the plant to process HRW (although the plant mainly processes high risk waste—such as radioactive waste from the nuclear sector). This increases its theoretical capacity for HRW to about [✂] tonnes a year (Fawley treated about [50–200] tonnes of HRW in 2012). If this mechanism would have been installed at Fawley absent the merger, then Tradebe could be considered a potential competitor to Sita HRW in Surrey.

4.7 Tradebe said that the main reason behind the [✂] investment was the processing of radioactive waste from the nuclear sector but a side effect of the investment might be the use of any spare capacity to process HRW. It said that absent the merger, the Fawley plant would not have been utilized for HRW except to a negligible degree because it was a long distance from Tradebe's HRW operations. Tradebe said that [✂]. It was carrying out testing to ascertain if some HRW tonnage could be added to Fawley without displacing the existing volume mix. Tradebe did not indicate that any of its other plants would have changed materially in the counterfactual.

Sita HRW in the counterfactual

4.8 The merger parties said[34] that Sita HRW was not a core business for the Sita Group, had lost significant contracts and was not performing well. They said[35] that Sita HRW was constrained by multiple organizational inefficiencies[36] and indicated (paragraph 3.7) that it needed to act quickly to address the issues it had identified.

4.9 The merger parties said that[37] the relevant counterfactual was that Sita HRW would have been sold to a different buyer and if another buyer could not be found Sita HRW would have continued to decline.

Sita HRW's historical operational and financial performance

4.10 The financial position of Sita HRW is detailed in Appendix C. The business has been loss-making in the last two years, and we consider it unlikely that this would have changed in the counterfactual. Sita said that eventually it would have had to close the business and sell the assets.

4.11 Mr Miles (see paragraph 3.1 above) told us that he believed the business had suffered from under-investment when owned by London Waste Limited, but that Sita had invested in it and in his view the business would soon start to benefit from this investment. Tradebe told us that Sita had invested to some extent in the HRW business when it first acquired it from London Waste Limited, but it had not invested sufficiently since around 2010 and the plants were deteriorating. It said that it had recently needed to replace [✂]. GW Butler said that the Sita HRW plants in Salford, Redditch and Wrexham were quite old and would require future investment. Sita told us that it was not prioritizing investment in its HRW business.

[34] ibid, paragraph 1.19.
[35] ibid, paragraph 4.1b.
[36] Sita said that responsibility for different parts of Sita HRW were managed by different divisions within Sita (material sourcing, logistics and processing) and Sita therefore did not have the best overview of how the Sita HRW business was performing financially.
[37] Initial submission, paragraph 1.19.

Other possible acquirers of Sita's HRW business

4.12 The merger parties told us that[38] in the counterfactual Sita HRW would have been sold to a different acquirer and that the HRW business would only have been attractive to an existing player (or someone involved in other waste markets) who could benefit from synergies.

4.13 The merger parties told us that there was no formal sale process for Sita HRW and Sita did not engage advisors or send the Information Memorandum beyond Tradebe and Mr Miles. Sita told us that it was likely that if Sita HRW had not been sold to Tradebe or Mr Miles it would have contacted an intermediary to try to sell Sita HRW. We first consider Mr Miles and then other possible acquirers of Sita HRW.

Mr Miles

4.14 We spoke to Mr Miles (see paragraph 3.1) who told us that when Sita gained full ownership of the HRW business he contacted Sita as he did not believe it fitted with Sita's business profile. Mr Miles told us that Sita approached him in 2012 and asked him to make an indicative offer based on some preliminary financial and strategic information. He had a meeting with Sita in April 2012 to discuss the business including its financial position and contracts and made an indicative offer of £[✂] million. Sita did not reject the offer but also did not progress it as Tradebe's offer was more favourable.

4.15 Mr Miles told us that he and his brother could finance the transaction personally but also had private equity in place to back the management team he had lined up. Although Mr Miles has experience in this sector and owns businesses in related sectors, he does not currently own any other HRW business.

4.16 In Mr Miles's view, if the business had not been acquired by him or Tradebe, Sita would have held on to it for a couple of years before engaging an accountancy firm to run a formal sales process. If that had happened, he believed that the eventual buyer might have been a foreign company looking to enter the UK market.

Other potential acquirers

4.17 As noted above, Sita told us that it had not approached any potential buyers of Sita HRW other than Tradebe and Mr Miles and did not engage advisors or send the Information Memorandum beyond Tradebe and Mr Miles. It said that in the event that the merger had not progressed it would have re-initiated discussions with Mr Miles.

4.18 Tradebe told us that it believed that any buyer would have needed significant experience of running a UK HRW company in order to have been able to turn around Sita HRW. It said that there were limited mechanisms available to turn around an HRW company since revenues are derived to a large extent from tenders making it difficult to increase revenues quickly. Tradebe said that industry experience was required to tender successfully and to maintain or increase the portfolio of contracts and argued that the main way to turn around Sita HRW in the short term was by reducing its cost base. It argued that a buyer from the UK HRW industry would benefit from savings such as routing efficiencies or internalizing HT processing while an alternative buyer from outside the UK HRW industry might consolidate some of the plants to increase capacity utilization. Tradebe said that a non-HRW UK company

[38] ibid, paragraph 4.8.

or a foreign HRW company would not have been willing to acquire Sita HRW and would have been unable to arrest its decline.

4.19 We spoke to a number of companies active in the HRW sector (SRCL, GW Butler, Veolia) and asked them whether they had an interest in acquiring Sita HRW. None of the companies expressed an interest in acquiring the business. [✂] told us that it had not considered entering into merger or JV arrangements with either party. Mr Miles suggested that another buyer that was not currently active in the UK HRW sector might have been interested in the acquisition (paragraph 4.16).

Operational changes

4.20 In our view, it is likely that Sita HRW would have closed its Wrexham AT plant in the counterfactual. However, Sita told us that this plant could be mothballed at relatively little cost and quickly reopened. Therefore we conclude that in the counterfactual Sita HRW would have access to the capacity of the Wrexham AT plant. Sita has not indicated it would have made other material changes to its HRW business in the event that it had not sold its business to Tradebe, including closure of or reduction of capacity at any of its other plants.

Assessment of the counterfactual

Tradebe HRW in the counterfactual

4.21 In our view it is not likely that Tradebe would have exited the HRW business absent the JV. Despite its lack of HT treatment capability, Tradebe HRW has been able to subcontract this HT treatment (for example with Veolia) and has still been able to operate its HRW business profitably. Neither Tradebe nor Veolia indicated that this arrangement could not have continued. Tradebe has not provided evidence indicating it contemplated exit or sale of its HRW business or any material changes to its operations. We consider that in the counterfactual it is unlikely that Tradebe would have used Fawley to process HRW.

Sita HRW in the counterfactual

4.22 Sita HRW in the UK was suffering financial difficulties and it seems unlikely that it would have been turned around by its immediate parent company. Although the business was loss-making, it had some value, particularly given its HT plant capacity. Given the difficulty and cost of building new HT treatment plants in the UK (see paragraph 6.144), in our view Sita HRW was unlikely to have closed any of its HT treatment plants without attempting to benefit from their value by selling them. There does not appear to be any commercial logic to Sita closing the HRW business without realizing value from it, and there was no evidence that suggested this had been its intention. We consider it unlikely that Sita HRW would have exited the market in the foreseeable future. The financial resources of its parent company would have allowed time to sell Sita HRW rather than close the business immediately due to its financial performance.[39]

4.23 In our view Mr Miles, the only party other than Tradebe with whom Sita had engaged, was a serious potential acquirer. He had expressed an interest in the business and his indicative offer was realistic. No other potential acquirers were approached by

[39] Sita HRW is part of the larger Sita UK business which is in turn a subsidiary of the multinational Suez Environnement which had revenues of €15.1 billion in 2012 and has substantial financial resources.

Sita. None of the existing HRW providers in the UK that we spoke to expressed interest in buying the business. A non-HRW UK waste company or a foreign company would appear to have less ability to add value to an acquisition and so might be less interested.

4.24 We also note that another option for Sita would have been to sell plants and their associated contracts separately. However, we note that Sita wanted to act quickly and did not want to devote significant management resources to Sita HRW (paragraph 3.7), which would militate against a piecemeal sale of assets.

Conclusion on the counterfactual

4.25 We therefore conclude that the most likely counterfactual is that Sita would have sold Sita HRW to a third party, and the most likely acquirer would have been Mr Miles. Sita HRW would have continued to compete in the HRW market.

5. Market definition

5.1 In this section we set out our decision on the relevant markets for this inquiry in order to provide us with a framework to analyse the competitive effects of the merger.[40] The relevant market is the market within which a merger may give rise to an SLC. It contains the most significant competitive alternatives available to the customers of the merger firms and includes the sources of competition to the merger firms that are immediate determinants for the effects of the merger.

5.2 The boundaries of the market do not determine the outcome of our analysis of the competitive effects of the merger in any mechanistic way. In assessing whether the merger may give rise to an SLC, we took into account segmentation within the relevant market, and other ways in which some constraints may be more important than others.

Customer segmentation

5.3 We have segmented the market between LQGs and SQGs because SQGs are serviced by collection-only companies as well as by integrated companies, whereas LQGs are typically only serviced by integrated companies (whether directly or through the intermediary of a FM company). This means that the competitive dynamics affecting these two categories of customers are different.

Product market

5.4 We defined the relevant product market as the market for the collection, treatment and disposal of HRW. This section outlines our reasoning.

Separate markets based on type of waste

5.5 We considered whether it would be appropriate to distinguish between two product markets based on the type of HRW treated. This approach would distinguish between:

[40] In line with our guidance, *CC2*, paragraphs 5.2.1 & 5.2.2.

(a) a product market for the collection and treatment of waste that requires HT treatment ('HT waste'); and

(b) a product market for the collection and treatment of waste that can be treated using either HT or AT ('AT waste').

5.6 We note that there is asymmetric substitutability on the supply side. HT plants can be used to treat both HT and AT waste, while AT plants can only be used to treat AT waste.[41] This means that, under hypothetical conditions, suppliers who own HT plants might be able to increase the price for HT waste without facing competition from suppliers who own AT plants only—for example, if customers were procuring treatment services separately for their two waste streams, and if it was impossible or difficult for suppliers to outsource the treatment of HT waste to third parties.

5.7 In practice, suppliers who only own AT plants (like Tradebe and GW Butler) compete with the owners of HT plants for the collection and treatment of both HRW streams. The collection and treatment of the two HRW streams is always procured jointly by customers, which means that suppliers effectively compete on the average HRW treatment price (with the prices for HT and AT waste being weighted by expected tonnages). A supplier may be able to compensate for a lack of competitiveness for the treatment of HT waste with greater competitiveness for the treatment of AT waste. Suppliers who solely own AT plants outsource the treatment of HRW for HT treatment to third parties (either treatment-only companies or integrated companies with spare HT capacity). HT HRW typically accounts for less than 20 per cent of HRW,[42] and a supplier who has to outsource HT treatment may be able to submit a competitive offer when its AT plant is well situated to supply the customer even with an HT treatment cost disadvantage.

5.8 We found that owners of AT plants can and do compete with owners of HT plants for the treatment of both waste streams. Tradebe HRW owned only AT plants before the merger but competed for the treatment of both waste streams.[43] GW Butler also owns only AT plants but competes for the treatment of both types of waste.

5.9 We do not consider that the asymmetric substitutability between AT and HT processes warrants the definition of two separate markets for HT and AT waste for the purpose of this inquiry. For the purpose of this inquiry we consider that HT treatment is better considered as an input into the final product than as a separate market. However, we recognize that there might be circumstances where suppliers with AT facilities only have limited options for outsourcing the treatment of HT waste, which might affect their relative competitiveness. We examine this question as part of the assessment of competition.

Separate markets based on vertical considerations

5.10 We considered whether it would be appropriate to distinguish between two product markets based on vertical considerations. This approach would distinguish between:

(a) a 'retail market' for the integrated collection, treatment and disposal of HRW. The customers in this market would be waste generators, and the suppliers would be integrated waste management companies and collection-only companies; and

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[41] There is also limited substitutability on the demand side, since customers are prohibited from using AT treatment for HT waste and they have no incentive to use HT treatment for AT waste (as HT treatment is significantly more expensive).
[42] HRW generated by hospitals (see paragraph 2.17).
[43] As noted in paragraph 4.6, Tradebe owns an HT facility at Fawley but it is not used to treat significant amounts of HRW at present.

(b) a 'wholesale market' for the treatment and disposal of HRW. The customers in this market would be collection-only companies and integrated companies which require treatment of part of their waste at third party facilities. The suppliers in this market would be treatment-only companies and integrated companies which treat HRW collected by third parties.

5.11 This approach might be useful should we identify circumstances where suppliers require access to external treatment capacity to compete for customers, and Tradebe HRW and Sita HRW were significant providers of such capacity. In such circumstances, the merger might allow Tradebe HRW and Sita HRW to exercise market power by increasing the treatment price charged to other suppliers (partial foreclosure), or by refusing to treat their waste in order to take retail business from them (total foreclosure).

5.12 In practice, foreclosure is only likely to be a risk in the SQG segment. LQGs are serviced only by integrated companies, which treat the vast majority of their HRW in-house, while SQGs can be serviced either by integrated companies or by collection-only companies which outsource the treatment of the HRW to other companies (integrated companies with spare capacity or treatment-only companies like Veolia).

5.13 Rather than distinguishing between two different markets throughout our inquiry, we have performed a more focused assessment of the options available to collection-only companies to outsource waste treatment in the relevant areas (see paragraphs 6.116 to 6.126). This approach is more targeted at the segment of the market where a risk of foreclosure might arise.

Geographic market

5.14 The relevant geographic market is the area within which rivals may compete. We aim to identify the geographic areas in which the merger is most likely to have an impact on competition. This assessment allows us to focus our competitive effects analysis on these areas. The competitive effects analysis also considers evidence related to the locations of customers, the merger parties and their competitors.

5.15 In defining relevant geographic markets we took account of three key features of the HRW industry:

(a) Transport costs. Transport costs account for a substantial share of the costs of providing the service (typically 30 per cent of total costs for LQGs and more for SQGs)[44] and they increase with the distance covered. This means that it is not economic to transport waste over long distances.

(b) Contract sizes. Tradebe said that the minimum level of contract required to support the development of new capacity was 2,500 tonnes a year, but that this would be dependent on the price per tonne and any associated investment required in the site. Other parties said that the minimum level required was larger (see paragraph 6.149). The large majority of HRW contracts are for much lower volumes, which means that most customers are only likely to get competitive offers from suppliers which already have a treatment plant in the area.

(c) Customer footprint. Most customers procure HRW services for one or several sites located in relatively small areas. A small group of customers prefer to deal

[44] Based on our analysis of supply costs for different customers in the area around Birmingham—see Section 6. Transport costs might be more significant in less densely-populated area so this is a conservative estimate.

with one supplier on a national basis (eg some private hospital groups, care homes companies, chains of pharmacies).

5.16 Taken together, these features of the HRW market indicate that usually customers are only likely to get competitive offers from suppliers that operate treatment plants located relatively close to their premises. This means in turn that competitive conditions are likely to vary locally. For these reasons we have used a local approach to market definition, where we considered a range of evidence to identify the customers that could be supplied by both Tradebe HRW and Sita HRW since these are the customers which could be affected by the merger (see paragraph 6.21).

5.17 We note that in recent years there have been some instances of NHS organizations forming consortia to tender for HRW services. The volumes contracted can be large, and in two cases (Merseyside and Yorkshire) a supplier has built a new plant in the area to service the contract. Therefore where HRW services are procured through consortia, such tenders may attract offers from suppliers that do not currently own any plants in the area. Instead of broadening our definition of relevant markets, we investigated the relevance of consortium tenders in our analysis of entry (see paragraphs 6.148 to 6.154).

5.18 The vast majority of customers require HRW services in a single local area or region. However, there may be some customers (eg because they have a network of sites which generate HRW) who prefer a provider with a national network of plants. Prior to the merger, SRCL appeared to be the only supplier with national coverage. Tradebe said that it or Sita HRW alone could not offer national coverage and so (absent the JV) it did not compete for national contracts. We recognize that the JV would create a competitor capable of competing on a national basis with SRCL. If we were to define a hypothetical market for customers that required national provision then the merger would be pro-competitive in this market.

5.19 For these reasons, we consider it is more appropriate to assess this JV on the basis of local markets.

Evidence received on the distance over which it is economic to transport waste

5.20 We assessed the distance over which it is economic to transport waste as part of our analysis of geographic markets. We started by considering the location of LQG customers served by Sita's Redditch plant and Tradebe's Yardley Green plant. This indicated that these plants derive 80 per cent of their revenues from customers located within about 50 miles (see paragraph 6.21).

5.21 We also asked the merger parties and their competitors to provide a view over the catchment areas of their plants. Tradebe said that many LQGs were located within 50 miles of a plant but catchment areas could extend up to 70 miles (and wider). It said the average distance travelled to LQGs by Tradebe HRW was 26 miles but extended up to 92 miles. It said that the catchment area could be further extended if a disposal plant was either short of waste or there was little competition locally. For SQGs Tradebe said that the distance between them was more important than the total distance from the plant and companies competed over a radius of 60 to 70 miles from their plants, but this distance could be extended considerably if there were a large number of collections in an area and an efficient route could be devised.

5.22 Other HRW suppliers indicated the effective competitive range of a plant was 50 to 75 miles:

(a) SRCL said that the average distance it travelled was about 50 miles for LQGs and 34 miles for SQGs. It said that the maximum distance was about 100 miles. SRCL said that it could make competitive bids within a range of 75 miles from its plants.

(b) GW Butler indicated that it had an effective radius of 50 to 60 miles from its plants. It said that for larger NHS contracts it would be willing to travel up to 75 miles.

(c) Grundon said that it was less competitive for LQG contracts over 60 miles away. It said that it had a longer effective range for SQGs as the impact of distance on cost was less because combined collection rounds and effective in-filling[45] could be achieved. Grundon estimated that its customers on average were 35 miles from its plants.

5.23 The information above suggests that HRW suppliers are most competitive within 50 to 75 miles of their plants, although we recognize that area, plant- or customer-specific factors such as the road network, capacity and costs, will affect the competitive effective range of a plant.

Identification of customers potentially affected by the merger

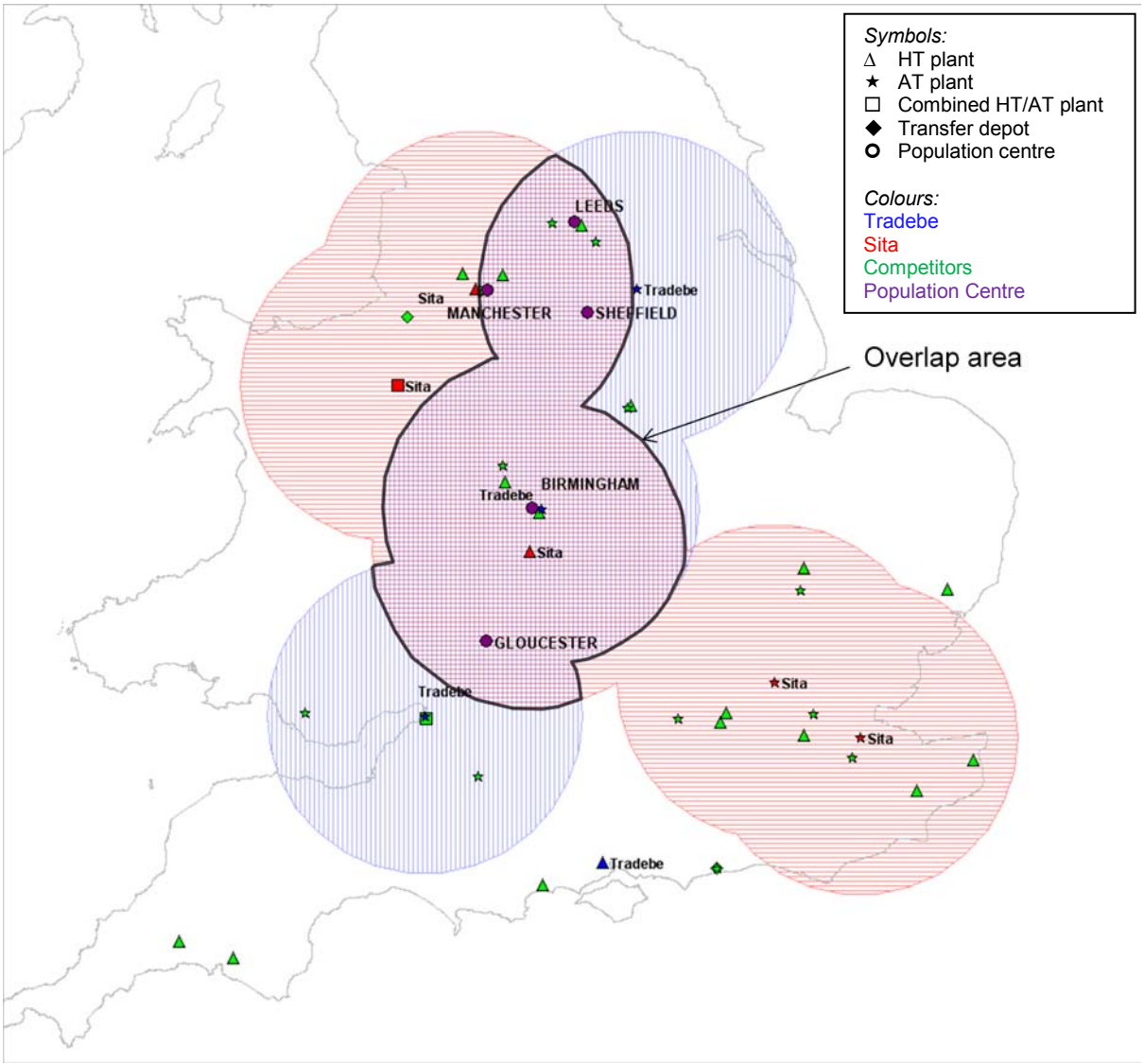
5.24 The demand centres where the merger is most likely to have an effect are those where the merger parties currently compete or are likely to compete against each other. We used a broad range of evidence to identify these demand centres.

5.25 As a starting point we used a general assumption about the distance over which it is economic to transport waste to delineate circular catchment areas around the plants of the parties. We used this approach to provide a high-level indication of areas where the merger parties were most likely to be strong competitors to each other, so we used the low end of the range we identified above, ie 50 miles (paragraph 5.23). We identified potentially affected areas (and customers) based on the intersection of these catchment areas. We found that the areas of overlap are Birmingham, Gloucester, Sheffield/Leeds and the Eastern part of the Greater Manchester area (see Figure 2).

[45] Gaining a sufficient number of sales within a particular area, or along a particular collection route, whereby a vehicle can undertake a reasonable number of collections during a trip/collection round, from a number of waste producers, thus gaining a sufficient number of collection charges to justify the miles travelled.

FIGURE 2

Illustrative 50-mile catchment areas around Tradebe HRW and Sita HRW plants



Source: CC analysis.

5.26 We then used more detailed information on pre-merger competition, including the location of the merger parties' current customers, locations where other bids were made by the merger parties, and the utilization of their plants. This additional analysis showed that the merger parties were not competing with each other to a significant extent in Sheffield/Leeds or Manchester and several competitors were active in these areas (paragraphs 6.26 to 6.31).

Conclusion on the relevant market

5.27 For the purpose of the statutory questions in this inquiry, we conclude that the relevant markets are as follows.

Relevant product market

5.28 For the reasons detailed in paragraphs 5.4 to 5.13, we conclude that the relevant product market is the market for the collection, treatment and disposal of HRW for

(a) SQG and *(b)* LQG customers. The services supplied in this market are AT and HT waste collection and treatment and disposal.

5.29 The treatment of HRW through either HT or AT is a regulatory requirement and the volume of waste generated does not depend significantly on the treatment price (albeit producers of waste may face stronger incentives to segregate waste correctly when the price of treatment increases). As such this definition of the product market would meet the hypothetical monopolist test.[46] We considered whether a smaller product market, for the collection, treatment and disposal of HRW requiring HT treatment would also satisfy the hypothetical monopolist test. However, we note the collection and treatment of HRW suitable for AT and HT treatment is procured jointly (paragraph 5.7) and we do not consider that there is a separate market for the collection, treatment and disposal of HT waste (see also paragraph 5.9). As noted in paragraph 5.2, this definition does not determine the outcome of our analysis of the competitive effects of the merger in a mechanistic way. We consider competitive effects in Section 6.

Relevant geographic market

5.30 For the reasons detailed in paragraphs 5.14 to 5.26, we conclude that the relevant geographic markets, where the effect of the merger would be strongest, are the areas of 50 miles around Birmingham and a further smaller area around Gloucester (see overlap areas in Figure 2).

6. Assessment of the competitive effects of the merger

6.1 In this section we assess the competitive effects of the merger and consider whether the JV has resulted, or may be expected to result, in an SLC within any market or markets in the UK for goods or services.[47] The majority of our assessment concerns LQG customers but we also assess the impact of the merger on SQG customers.

6.2 We first consider the nature and extent of pre-merger competition (paragraphs 6.5 to 6.62). In paragraph 4.25 we concluded that the most likely counterfactual was that Sita HRW would have been acquired by Mr Miles and would have continued to compete in the HRW market. In circumstances where the counterfactual is essentially the same as the pre-merger situation,[48] the extent of pre-merger competition is an important indicator of the degree of competition that is lost as a result of the merger.

6.3 We then assess the effects of the merger against the competitive position in the absence of the merger (paragraphs 6.63 to 6.142).

6.4 Finally, we consider whether the impact of new entry and/or buyer power would act as countervailing factors to act against any possible adverse effects of the merger (paragraphs 6.143 to 6.164).

Pre-merger competition

6.5 In our assessment of pre-merger competition we assess:

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[46] *CC2*, paragraph 5.2.11, states: 'In applying the hypothetical monopolist test, the Authorities will assess whether the hypothetical monopolist could profitably raise the price of at least one of the products in the candidate market by at least a small but significant amount over a non-transitory period of time (ie by a 'SSNIP'—a small but significant and non-transitory increase in price).'

[47] The Act, section 35(1)(b).

[48] Mr Miles does not have any other HRW businesses that would affect the degree of competition Sita HRW would provide.

(a) how competition works in the HRW market (paragraphs 6.6 to 6.15);

(b) the overlap between the merger parties in terms of location of their plants and the type and location of customers they serve (paragraphs 6.16 to 6.31);

(c) competitors in the areas of overlap (paragraphs 6.32 to 6.44); and

(d) the evidence we have received from hospitals, the merger parties and SRCL on recent tenders for HRW and the bids made by the merger parties and their competitors (paragraphs 6.45 to 6.60).

Competition in the HRW market

6.6 Before explaining our findings on pre-merger competition we set out description of the nature of competition in this market, as this is useful to interpret the evidence we have gathered.

6.7 As noted in paragraph 2.8, most LQGs, as government bodies, are obliged by law to procure HRW services through a transparent and formal tender process if the contract value exceeds the relevant threshold (based on the OJEU process and currently £73,934). At the first stage LQGs issue a Pre-Qualification Questionnaire (PQQ) setting out the key requirements for participating in the tender. There is a duty of care on the producer and all subsequent holders of HRW to ensure that it is correctly managed and that those to whom it is transferred are provided with a full and accurate description of the HRW. If there are problems with the collection of HRW from an LQG customer this can affect the performance of the customer. Therefore large HRW producers are careful to make sure that tenderers will be able to supply HRW services without problem. Customers can disqualify suppliers based on their responses to the PQQ, for example if the customer considers the financial resources or relevant experience of the supplier are inadequate.

6.8 At the second stage customers obtain sealed bids from suppliers setting out their price, their credentials and their commitments on quality of service. These bids are then assessed based on pre-specified criteria and the customer usually performs inspections of each supplier's facilities.

6.9 Based on the sample of tenders we have reviewed (Table 6), there was only one case where the winning bidder was not the most competitive on price (from 16 tenders where hospitals reported the price and quality scores separately). This indicates that after the PQQ stage quality, although important to customers, is not a strong differentiating factor between the leading suppliers, and that the relative cost-competitiveness of different suppliers is a good proxy for their overall competitiveness in tenders.

6.10 The typical length of a contract is three years with an optional two years' extension. The price is typically indexed on a price index (CPI or RPI). The average volume of HRW produced by a NHS trust in the area around Birmingham equates to sales of HRW services of about £300,000 a year, which represents about 7 per cent of the turnover of a medium-sized supplier like Tradebe HRW. Therefore, most individual contracts are of substantial value to a supplier. HRW services are frequently procured by consortiums combining several NHS trusts, which means that the value of a contract relative to the size of the supplier can be much larger.

6.11 There are two major costs involved in servicing a customer:

(a) The first is transport cost, which is a large component of the cost of servicing a customer (typically 30 per cent of total cost). This depends primarily on the location of a supplier's plant relative to the customer.[49] There may also be additional transport costs—for example, for transporting HT waste from a supplier's AT plant to an HT plant.

(b) The second major cost is the HRW treatment and residue disposal cost. This depends on the cost of operating the treatment plant and the options a supplier has for treating HT waste (in particular whether a supplier can treat it in-house or whether it needs to outsource this operation to a third party).

6.12 Therefore key factors that affect the competitiveness of suppliers are the proximity of their plants to the customer relative to the plants of competitors and the cost to the supplier of treating the HRW.

6.13 A number of hospitals told us that, in a given tender, the incumbent might have a slight advantage in that it knows the geography of the sites to be serviced and any operating constraints. Three hospitals also said that reappointing the incumbent could ensure continuity of operations. However, in practice hospitals frequently switch between suppliers of HRW services: of the 18 tenders that we have reviewed (Table 6), ten resulted in a switch between suppliers. Therefore customers are not locked into their relationship with the incumbent, and the results of past tenders do not necessarily determine the outcome of future tenders.

6.14 Since each competitor knows the location of suppliers, as well as the treatment technology at plants and each company's probable options for treating HT waste, each competitor is able to estimate reasonably well the likely costs of its rivals in a given tender. This information is supplemented by the competitor's win/loss record in other tenders. Suppliers are able to take account of their competitiveness relative to their competitors in bidding. That is, suppliers are able to set their bid so as to undercut their closest competitors (subject to this being sufficient to cover their costs), based on their knowledge of the market and the lowest cost supplier will bid below the cost of the next lowest cost supplier to ensure it wins the tender.[50]

6.15 Against this backdrop we consider that competitive interactions are best assessed by considering the relative competitiveness of suppliers for different customers. A supplier is most likely to charge prices above its costs in a situation where it is the most competitive. The most relevant constraint on the pricing power of the most competitive supplier is the cost of the second most competitive supplier. This means that the merger is most likely to be harmful in situations, and unilateral effects are most likely to be strongest, where the parties are the two most competitive bidders for a customer, and we have designed our approach with a view to identifying any such circumstances. Appendix F provides a more detailed illustration of how we have assessed the effect of the merger on pricing and competition.

Overlaps between the merger parties

Location of plants

6.16 Figure 3 shows the locations of treatment plants and transfer stations in Great Britain. Sita HRW has HT plants in Salford, Wrexham and Redditch and AT plants in

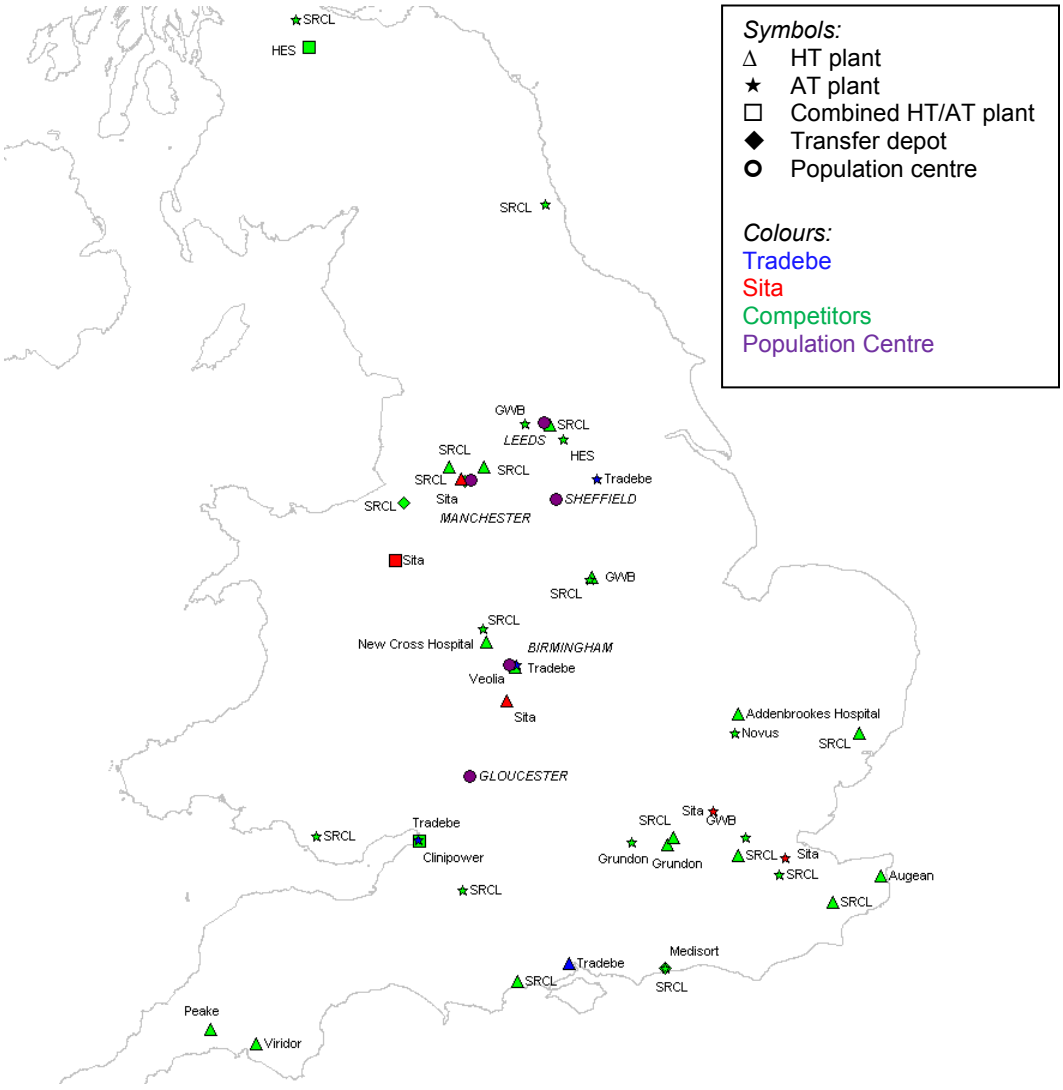
[49] This is particularly the case for LQG customers, where usually supplier vehicles make a single trip to the customer. For SQG customers a supplier will collect HRW via a 'milk round', making multiple stops. Here cost also depends on whether an efficient route can be devised.
[50] Recognizing that competitors may bid with a safety margin they reflect that they do not have perfect information.

Wrexham, Enfield (Chase Farm) and Rochester. Tradebe HRW has AT plants in Avonmouth, Birmingham, Doncaster (Rossington) and Fawley. Fawley only treated small amounts of HRW prior to the merger and we assume that would continue to be the case in the counterfactual (paragraph 4.21).

6.17 In addition to what is shown in the map, SRCL has informed us of [✂]. It is currently constructing a new AT plant in Merseyside following its successful tender for a consortium of 16 NHS trusts in the area. It is due to open in Q1 2014. [✂] HES told us that [✂].

FIGURE 3

Location of treatment plants and transfer stations in Great Britain



Source: CC analysis of data from merger parties, data submitted by SRCL, Medisort website, Clinipower website and Augean website.

Customer types

6.18 Customer data supplied by Tradebe HRW shows that its main groups of customers are hospitals, either directly or through subcontracting with a facilities management

or general waste management company; clinical commissioning groups (CCGs),[51] and collection-only companies.

6.19 Tradebe HRW also serves companies involved in the medical and pharmaceutical industry and county councils. It does not supply significant HRW services to individual SQGs that require collection.[52]

6.20 Customer data supplied by Sita HRW shows that it services the same types of customers as Tradebe HRW but additionally provides services to SQGs who purchase HRW services independently, primarily around its Redditch plant. Its main groups of customers are hospitals; companies which administer wider facilities or waste management contracts for NHS organizations; NHS acute trusts and mental health trusts; CCGs; independent sites (typically SQGs such as dentists or nursing homes); and third party collection-only companies that either collect HRW from customers for collection by Sita HRW or collect HRW from customers and deliver it directly to Sita HRW's plants.

Geographic overlap

6.21 We focus on assessing the effect of the merger on those customer groups served by the merger parties. Figure 4 shows the location of Tradebe HRW and Sita HRW LQG customers which require collections. It has a number of notable features:

(a) About 80 per cent of customers (by revenue) are within 50 miles of the Sita Redditch[53] and Tradebe Birmingham plants.[54] However, Sita HRW also services customers in Luton, Milton Keynes and Hinchingbrooke from Redditch. These are between 70 and 100 miles from Redditch. Similarly, Tradebe services a customer in Manchester from its Birmingham facility, which is more than 100 miles away.

(b) The greatest overlap of LQG customers is in the Birmingham area and there is some overlap in the North-West where Tradebe HRW has [✂] customers in the Merseyside and Greater Manchester area.[55] Apart from the HRW from one customer,[56] all other customers of the Tradebe Doncaster plant are on the eastern side of the Pennines. Conversely Sita HRW performs no collections in the Leeds or Sheffield area.

(c) Tradebe HRW has [✂] customers which require collections in the Gloucester area at present, despite having plants in both Birmingham and Avonmouth.

(d) Sita HRW serves a number of hospitals in North Wales as a subcontractor. This arrangement resulted from the divestment of the Wrexham plant from SRCL to Sita as part of the 2006 CC decision in Stericycle/STG. SRCL said that unless the contract was re-awarded to Sita HRW this would cease to be the case when the new All Wales contract began (anticipated to be in 2014).

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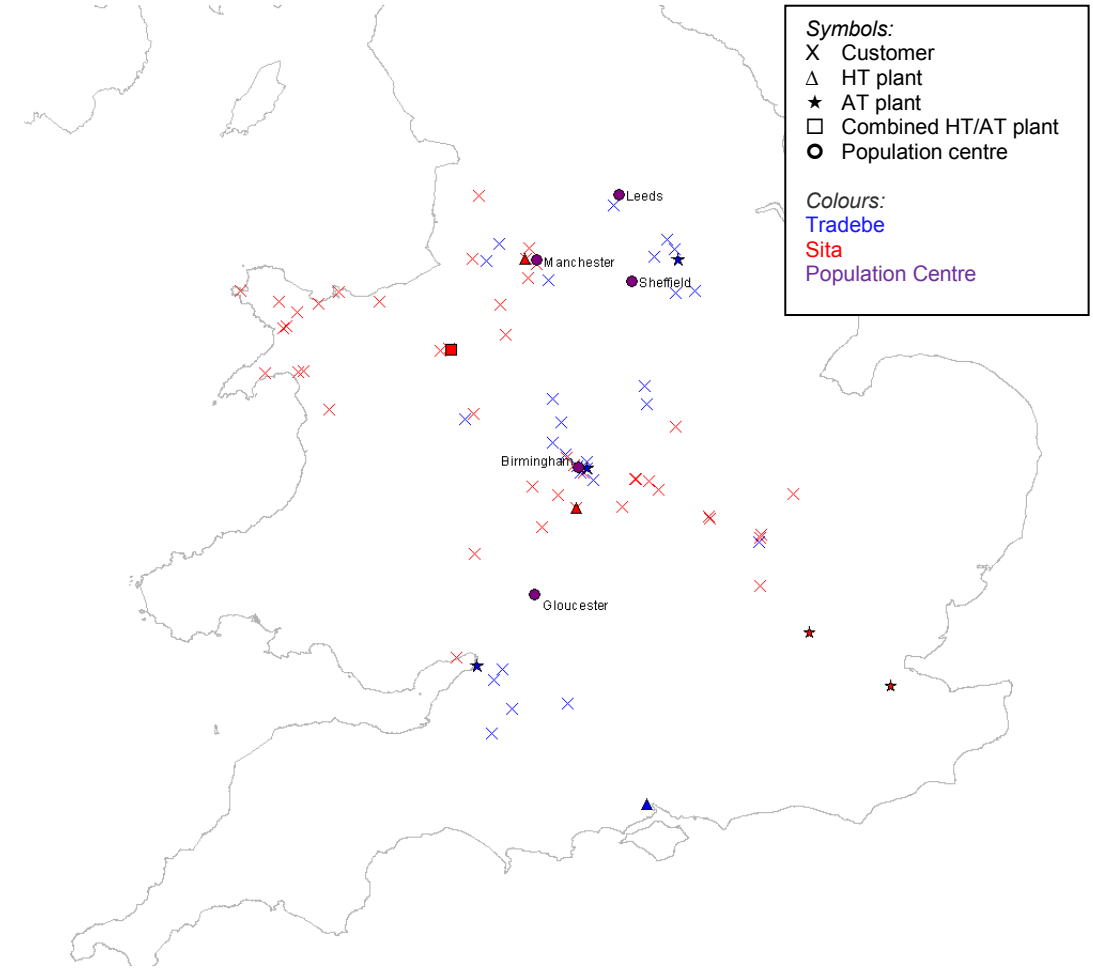
[51] CCGs are SQGs which purchase HRW services collectively. Tradebe collects directly from about [✂] SQG sites such as GPs and pharmacies as part of a contract with the now defunct Bristol, North Somerset and South Gloucestershire Primary Care Trusts which are treated at its Avonmouth plant. This work accounted for about £[✂] million of revenue in 2012. Tradebe has no such collective contracts for SQGs for waste to its Doncaster or Birmingham plants.
[52] Tradebe had about £[✂] of revenue associated with [✂] SQGs for its Avonmouth plant in the calendar year to October 2013.
[53] Acute hospitals only.
[54] We note however that due to the large size of individual customers and the low number customers, such customer-based catchment area analysis can be very sensitive to the location of a single large consumer.
[55] [✂], from which Tradebe HRW collects waste from [✂] for treatment at its Doncaster plant; [✂]. The operations are now subcontracted to [✂]; and [✂], which is serviced from Birmingham. Tradebe also collects waste from Initial in Leeds, Bristol and Birmingham.
[56] [✂] waste from [✂].

FIGURE 4

Tradebe HRW and SITA HRW LQG customers which require collections



Source: CC analysis.
Note: Only includes Sita customers serviced from Wrexham, Redditch or Salford plants.

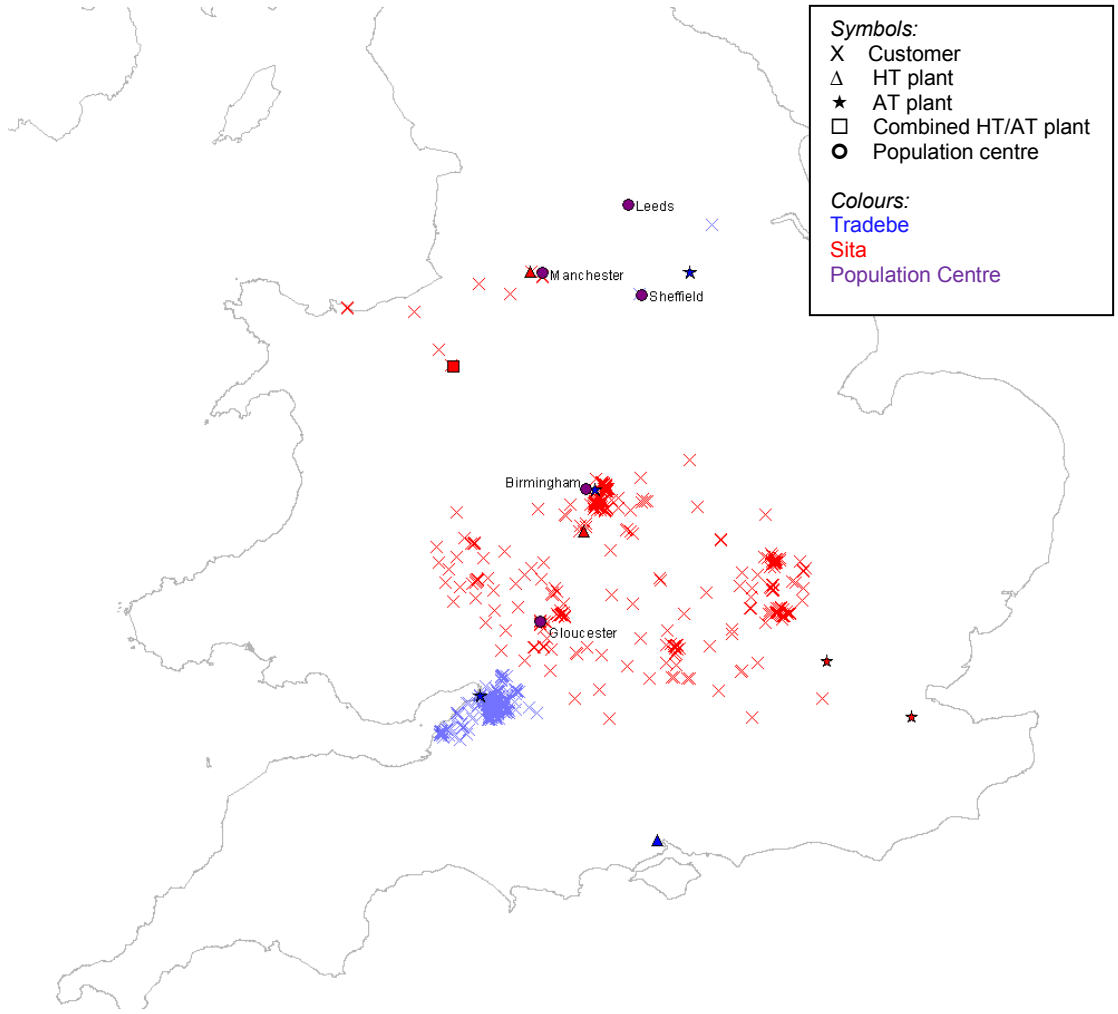
6.22 Figure 5 shows the location of Tradebe HRW and Sita HRW SQG customers which require collections. It has a number of notable features:

(a) Sita HRW's SQG collection sites are distributed across a much wider area than Tradebe HRW's, consistent with its business providing services to independent SQGs.

(b) Tradebe HRW's SQGs are nearly entirely limited to the area around the Avonmouth plant.

FIGURE 5

Tradebe HRW and SITA HRW SQG customers which require collections



Source: CC analysis.
Note: Only includes Sita customers serviced from Wrexham, Redditch or Salford plants.

6.23 Tradebe stated that Sita HRW was not a current or potential competitor in the Sheffield area. Tradebe said that Sita did not operate its HRW business in the Sheffield area because it did not have any HRW plants to the east of the Pennines. The data on customer locations confirms that [✂].

6.24 Figures 4 and 5 show that the most substantial overlap of customer locations between Tradebe HRW and Sita HRW occurs in the areas of 50 miles around Birmingham and a further smaller area around Gloucester. If population centres or groups of customers are within the catchment area of both a Sita HRW and Tradebe HRW plant, they may both actively compete for customers in the area even if one or both of them does not currently have a contract there. Therefore, in addition to identifying where current customers are located it is also important to identify the location of potential customers, assess historic bidding patterns and assess whether there are any future contracts which the merger parties are likely to compete for.

The South-East

6.25 In paragraph 4.21 we considered that Fawley was unlikely to process substantial amounts of HRW in the counterfactual. Therefore we do not consider there will be an overlap in the South-East between the merger parties in the counterfactual.

Lancashire/Yorkshire

6.26 Sita HRW's plant in Salford is 44 miles from Leeds and 89 miles from Sheffield.[57] Sita HRW has no customers in Leeds or Sheffield Tradebe HRW's Doncaster plant is 26 and 43 miles away from Leeds and Sheffield respectively. We are aware of [✂] in which the merger parties bid for the same tender in this area. Both parties bid for the [✂]. The value of this contract was relatively low, just £[✂] in 2012. PHS won the contract. The merger parties also bid for [✂], which included sites in this and other areas. However, they later [✂] did not have concerns about the merger and did not consider it would affect their bargaining position. In our view, this does not suggest a strong competitive interaction between the merger parties in this area.

6.27 SRCL, HES and GW Butler are all closer to the Leeds and Sheffield than Sita HRW.[58] Based on the limited competitive interaction between the merger parties and the number and location of other competitors, we do not expect competitive concerns to arise in this area as a result of the merger.

6.28 As noted in paragraph 6.21, Tradebe HRW has three customers in the Greater Manchester and Merseyside area of which [✂]. There are a number of large NHS LQG customers in the area and Tradebe HRW's customer base in this area is likely to be small relative to the total size of the market.

6.29 Excluding the [✂] contract, [✂], which was won by Tradebe HRW is the only contract the merger parties both bid for in this area.

6.30 Sita HRW's Salford plant is five miles from Manchester while Tradebe HRW's Doncaster plant is 76 miles away.[59] SRCL has plants in Oldham ((9 miles away) and Bolton (15 miles away). GW Butler (37 miles) and HES (52 miles) are also closer to Manchester than the Tradebe HRW plant. Based on the limited competitive interaction between the merger parties and the number and location of other competitors, we do not expect competitive concerns to arise in this area as a result of the merger.

Summary of geographic overlap

6.31 Based on information in paragraphs 6.21 to 6.30, the overlaps of potential competitive concern between the merger parties, where the effect of the merger would be strongest, occur in the area of 50 miles around Birmingham and a further smaller area around Gloucester. The remainder of the competitive effects analysis focuses on these areas.

[57] Some cross-Pennine routes (such as Snake Pass) are unreliable in winter but we have assumed that trucks are able to use the M62 to cross the Pennines and have calculated the mileages accordingly. Tradebe said that transport from one side of the Pennines to the other was challenging throughout the year and there are periods in the winter when it is simply not possible to drive HRW trucks across the Pennines, so lengthy alternative routes would be needed.
[58] SRCL's plant is in Leeds and 37 miles from Sheffield; the HES plant is 13 miles from Leeds and 27 from Sheffield and the GW Butler plant is 10 miles from Leeds and 44 miles from Sheffield.
[59] Via M62.

Competitors in the Birmingham and Gloucester areas

- *SRCL*

6.32 Customer data provided by SRCL suggests it has a significant number of customers in the Birmingham and Gloucester areas and is likely to be a strong competitive constraint on the merger parties in these areas.

- *GW Butler*

6.33 GW Butler's Nottingham plant is 51 miles from Birmingham and services both LQGs and SQGs. The Bradford plant serves North and East Yorkshire, Manchester and Sheffield. The Nottingham plant serves Nottingham, Lincolnshire and the north-eastern Birmingham. GW Butler said that it served only one customer in the Birmingham[60] area and had no customers in the Gloucester area. This was confirmed by customer data it provided. It also said it had no plans in the short term to expand into the Gloucester or Bristol areas.

6.34 We note the distance of GW Butler from customers in the central part of the Birmingham area, compared with those of Tradebe HRW, Sita HRW and SRCL means it is at a significant transport cost disadvantage for this area. This also applies to Gloucester, which is further still from the GW Butler plant. This disadvantage also appears to be evidenced by the limited customer base of GW Butler in these areas. This suggests GW Butler is likely to exercise only a limited competitive constraint in the central part of the Birmingham area. It may be stronger in the area between Nottingham and Birmingham, closer to its Nottingham AT plant. It also suggests GW Butler does not exert a strong competitive constraint in Gloucester.

- *Grundon*

6.35 The merger parties identified Grundon as a source of competition in the Gloucester area. It services both LQGs and SQGs. Grundon's plants are 90 to 95 miles from Gloucester and 95 to 100 miles from Birmingham. Information from Grundon showed that its nearest significant LQGs were in Swindon (about 40 miles south-east of Gloucester) and Oxford (around 50 miles east of Gloucester). Its nearest SQGs were further away from Gloucester.[61] Therefore Grundon does not have active customers in the relevant geographic markets. Grundon said that the [✂] was the only significant LQG contract it would bid for in the Gloucester area. It also said that it would bid for [✂].

6.36 Grundon has not bid in any of the tenders for which we hold data in the relevant geographic markets and although Grundon may be expected to bid for some contracts in the Gloucester area it has not been successful in winning significant contracts. Grundon therefore appears unlikely to exert a strong competitive constraint on the JV in the relevant geographic markets.

- *Healthcare Environmental Services*

6.37 The tenders for which we have bidding data indicates that HES has bid in Rotherham, North Staffordshire and Hinchingbrooke but has not been successful. HES confirmed it had bid for a number of tenders but had been unsuccessful. This

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[60] [✂]
[61] Grundon had no significant contracts involving collection from multiple sites or groups of SQGs in Gloucestershire, Oxfordshire and Wiltshire.

suggests that HES is active commercially in the Northern part of the area of Birmingham overlap but has not been able to bid competitively.

- *Veolia*

6.38 The merger parties consider that the JV will face a strong competitive constraint from non-integrated competitors with HRW plants such as Veolia, which operates an HT plant in Birmingham.[62] Tradebe considers Veolia might compete in two ways: first by developing its business to become an integrated supplier, offering both treatment and collection services to LQGs; and second, by working with collection companies to jointly replicate the offering of integrated companies.

6.39 Veolia said that [✂]. It told us that its expertise was in treatment and its current treatment-only business model was [✂] than one with collection (it had offered a loss-making collection service in the past). Veolia said that it did not have any plans to [✂]. It said that in the past it had worked with companies such as [✂] or [✂] to provide the HT element of bids for NHS tenders but had also looked to partner with clinical waste collectors to bid for NHS tenders which included both general and clinical waste. It was not aware of any such contracts currently being dealt with by its plant.

6.40 However, we note that Tradebe HRW is planning to withdraw its HRW from Veolia after the merger, and [✂] might do the same for some of its HT waste [✂].[63] It could drop its price for HT treatment to replace lost volume, which may allow other suppliers to compete more effectively. It could also partner with another supplier or develop its own collection service. On balance, we believe that Veolia is unlikely to develop into an independent competitor to SRCL and the JV in the short term but the actions it may take could have the effect of increasing competition in the relevant geographic markets.

- *Collection-only companies*

6.41 Our analysis of bidding data indicates collection-only companies have been bidding for LQG work, but we have seen no evidence that they have been successful. Collection-only companies do not have their own treatment facilities. Hinchingbrooke Hospital said that it viewed a lack of disposal facilities as a risk to ensuring 'duty of care' obligations were met. Initial told us that it focused on smaller customers. Based on this, we consider that collection-only companies may be able to compete effectively for SQGs but not LQGs.

The importance of location

6.42 A key issue that affects the competitiveness of suppliers is their location with respect to the location of customers compared with the location of competitors. Transport costs form a large proportion of total costs and form a key element of defining how competitive a supplier is.[64] In general we find Sita HRW, Tradebe HRW and SRCL are located closer to major customers than other competitors in the areas around Birmingham and Gloucester. While GW Butler and Grundon are closer than other

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[62] Initial submission.
[63] As we noted in paragraph 2.28, HT waste is often secondarily transported to an HT plant and this could be over a substantial distance.
[64] For example, the difference in transport costs incurred to supply a large hospital in Birmingham for GW Butler (located in Nottingham) than for Tradebe (located in Yardley Green) represent about [✂] per cent of the total cost of servicing this customer.

competitors besides Sita HRW, Tradebe HRW and SRCL they are still geographically on the fringe of the relevant geographic markets and therefore are less competitive for most customers.

Market shares in the relevant geographic markets

6.43 The merger parties' estimates of market shares in the overlap areas of Birmingham and Gloucester are shown in Tables 4 and 5 below. These tables show that SRCL has the largest market share in both areas, with Sita HRW and Tradebe HRW supplying most of the remainder.

TABLE 4 **Market share of LQG customers within 50 miles of Birmingham (excluding self-supply)**

Firm	*Share—revenue %*	*Share—count of customers %*
SRCL	[50–60]	[60–70]
Sita HRW	[20–30]	[20–30]
Tradebe HRW	[10–20]	[10–20]
GWB	[0–10]	[0–10]
Unknown	[0–10]	[0–10]
Total	100	100

Source: Merger parties' estimate of volume and revenue, estimated based on an assumption of 0.8 tonnes of waste per bed per year and 3:6:1 ratio of waste split between HT, AT and offensive waste.

TABLE 5 **Market share of LQG customers within 50 miles of Gloucester (excluding self-supply)**

Firm	*Share—revenue %*	*Share—count of customers %*
SRCL	[50–60]	[60–70]
Sita HRW	[20–30]	[20–30]
Tradebe HRW	[10–20]	[0–10]
Grundon	[0–10]	[0–10]
Total	100	100

Source: Merger parties' estimate of volume and revenue estimated based on an assumption of 0.8 tonnes of waste per bed per year and 3:6:1 ratio split between HT, AT and offensive waste.

6.44 We have used market shares only as a high-level indicator of the strength of different suppliers in this area in the sense that they reflect each party's success over time in winning tenders. However, they do not provide information on which suppliers competed for which tenders and in particular which suppliers were the most competitive for which tender, where the location of the supplier's treatment plant relative to the customer is a key factor that affects the supplier's competitiveness. The merger is most likely to be problematic in circumstances where Sita and Tradebe are the two most competitive bidders for particular tenders and market shares provide no direct information on the prevalence of such circumstances. We therefore believe that the precise effects of the merger are better assessed by considering the relative competitiveness of different suppliers for different customers located in this area.

Analysis of bids

6.45 As noted in paragraph 6.6, large contracts for HRW services are awarded following a tender process. Analysis of the results of bids in such tender processes gives information regarding which suppliers competed and were competitive for each customer, and so gives insights into the competitive situation in the markets in which we are interested. In this section we analyse bidding data received from customers which we

use to assess the tenders in which both merger parties have competed. We also consider details of bid records provided by SRCL.

6.46 We have requested data relating to past tenders from customers in the Birmingham, Gloucester, Leeds/Sheffield and Manchester areas. We have analysed information relating to 20 tenders.[65] The data set does not cover all potential customers, but does include tender data relating to about half of the acute hospitals in the Birmingham and Gloucester areas and includes large contracts such as the West Midlands Consortium, Heart of England NHS Foundation Trust and Gloucestershire NHS Foundation Trust. Some of these tenders covered multiple sites or consortia. Most of these tenders were in the past four years. Most of the tenders are for LQG customers (mainly hospital trusts) but three are for large NHS SQG contracts. Details of the tenders analysed are in Appendix E and summarized in Table 6.

6.47 We also received data relating to past bids from the merger parties and their competitors. This data is likely to be less useful than customer-provided data as companies typically have less information regarding who else competed in the tender and how bidders ranked. Nonetheless, by combining this data with the customer data we can make an assessment of the tenders in which both parties competed. Based on the data supplied, we have identified [✂] such tenders where both parties bid (excluding the joint bid for the Initial contract), which are summarized in Table 7 and which are detailed in Appendix E.

6.48 There are a number of factors to consider when making general statements based on the bidding data. Our sample, while covering about half of the acute hospitals in the relevant area, is not exhaustive. Different companies are active in different areas and we note that the competitiveness of suppliers will depend on both the location of customers and plant capacity and utilization at the time of the tender. Finally a number of mergers and instances of entry and exit have occurred, leading to a changing competitor set over time. Nevertheless, we believe the coverage of the sample is sufficient to make informative inferences about competition in the market.

6.49 We have focused our analysis of customer data on individual tenders, particularly recent tenders in the areas close to Birmingham or Gloucester.

[65] Specifically, they identified the winners, participants and in many cases the ranking of participants in their tenders.

TABLE 6 **Summary of tender data received from customers**

Customer	*Both Tradebe HRW and Sita HRW bid*	*Area*	*Type of customer*	*Year of tender*	*Current supplier*	*Contract won by*	*Previous incumbent*	*Bid rank (highest rank first, only win-loss data available where starred*)*	*Failed PQQ*	*2012 value £*	*Sites*
Royal United Bath Trust	Yes	Bath	Hospital Trust (LQG)	2013	Tradebe HRW	Tradebe HRW	WAS24	[✂]	[✂]	[✂]	[✂]
Lincolnshire Community Health Services NHS Trust	Yes [✂]	Lincoln	Community Health Services (SQG)	2013	PHS	PHS	unknown	[✂]	[✂]	[✂]	18
Doncaster and Bassetlaw NHS Foundation Trust	No	Sheffield	Hospital Trust	2013	Tradebe HRW	Tradebe HRW	Tradebe HRW	[✂]	[✂]	[✂]	3
Warrington and Halton Hospitals NHS Foundation Trust	No	Manchester	Hospital Trust	2013	SRCL	SRCL	Sita HRW	[✂]		[✂]	2
University Hospital North Staffordshire and Mid Staffordshire Trust	Yes	Staffordshire	Hospital Trust	2013	Tradebe HRW	Tradebe HRW	Tradebe HRW	[✂]	[✂]	[✂]	4
[✂]*	No	[✂]	[✂]	2013	Tradebe HRW	Tradebe HRW	GW Butler	[✂]		[✂]	1
North Bristol Trust	Yes	Bristol	Hospital Trust and SQGs	2012	SRCL	SRCL	SRCL	[✂]	[✂]	[✂]	6
Hinchingbrooke Healthcare NHS Trust	Yes	Huntingdon	Hospital Trust	2012	Sita HRW	Sita HRW	Sita HRW	[✂]	[✂]	[✂]	1
Shrewsbury and Telford NHS Trust	Yes	Birmingham	Hospital Trust	2012	SRCL	SRCL	Tradebe HRW	[✂]		[✂]	2
Bristol County Council	No	Bristol	County Council	2012	Tradebe HRW	Tradebe HRW	Tradebe HRW	[✂]		[✂]	Delivery
Weston Area Health Trust	No	Bristol	Hospital Trust and SQGs	2010	SRCL	SRCL	Cliniserve	[✂]		[✂]	1
Bristol County Council	Yes	Bristol	County Council	2010	Tradebe HRW	Ecowaste	Ethos	[✂]		[✂]	Delivery
Gloucestershire Hospitals NHS Foundation Trust	Yes	Gloucester	Hospital Trust	2009	SRCL	SRCL	Polkacrest	[✂]	[✂]	[✂]	7
Kettering General Hospital NHS Foundation Trust	No	Birmingham	Hospital Trust	2009	SRCL	SRCL	Polkacrest	[✂]	[✂]	[✂]	2
University Hospitals Birmingham FT Consortium	No	Birmingham	Hospital Trust	2009	SRCL	SRCL	Eurocare Ltd	[✂]	[✂]	[✂]	5+
Brighton and Sussex University Hospital Trust	No	Brighton	Hospital Trust	2007	SRCL	SRCL	SRCL	[✂]		[✂]	2
Royal United Bath	No	Bath	Hospital Trust	2006	Tradebe HRW	WAS24	White Rose	[✂]	[✂]	[✂]	1
Weston Area Health Trust	No	Bristol	Hospital Trust and SQGs	2005	SRCL	Cliniserve	Unknown	[✂]		[✂]	1
Heart of England NHS Foundation Trust	Yes	Birmingham	Hospital Trust	2001	Tradebe HRW	Britcare (SRCL has separate contract for 1 site)	Self-supply	[✂]		[✂]	7

Customer	Both Tradebe HRW and Sita HRW bid	Area	Type of customer	Year of tender	Current supplier	Contract won by	Previous incumbent	Bid rank (highest rank first, only win-loss data available where starred*)	Failed PQQ	2012 value £	Sites
Birmingham and Solihull Mental Health Foundation Trust	No	Birmingham	SQG	2009	SRCL	SRCL	Unknown	[✂]		[✂]	46

Source: Customer questionnaire response.

Notes:
1. 'Contract won by' is different to 'Current supplier' when the company that won the bid was acquired after it won the bid.
2. [✂] requested quotes rather than conducting a full tendering exercise.

TABLE 7 **Tenders in which the merger parties both bid since 2010 (with some additional contracts from earlier periods)**

Customer	Sites	Winner	Other bidders (failed PQQ in brackets)	Area	Relevant to Gloucester or Birmingham	2012 value/volume £	Customer supplied tender data	Year
Royal United Bath Trust	1	Tradebe HRW	[✂]	Bath	Potentially	[✂]	Yes	2013
Lincolnshire Community Health Services	17	PHS	[✂]	Lincolnshire	No	[✂]	Yes	2013
North Staffordshire and Mid Staffordshire Hospital Trusts	4	Tradebe HRW	[✂]	Staffordshire	Yes	[✂]	Yes	2013
North Bristol Trust	6	SRCL	[✂]	Bristol	Potentially	[✂]	Yes	2012
Hinchingbrooke Healthcare NHS Trust	1	Sita HRW	[✂]	Huntingdon	Yes	[✂]	Yes	2012
Shrewsbury and Telford NHS Trust	1	SRCL	[✂]	Shropshire	Yes	[✂]	Yes	2012
Bristol County Council	Delivery	Tradebe HRW/ Ecowaste	[✂]	Bristol	Potentially	[✂]	Yes	2010
Gloucestershire Hospitals NHS Foundation Trust	7	SRCL	[✂]	Gloucester	Yes	[✂]	Yes	2009
Heart of England NHS Foundation Trust	6	Tradebe HRW/ Britcare (1 contract held by SRCL)	[✂]	Birmingham	Yes	[✂]	Yes	2001
Stockport NHS Foundation Trust	1	Tradebe HRW	[✂]	Manchester	Potentially	[✂]	No	2013
Buckinghamshire Healthcare NHS	10	SRCL	[✂]	Buckinghamshire	Potentially	[✂]	No	2012
Health Trust Europe Consortium	4+	SRCL	[✂]	Shropshire	Yes	[✂]	No	2012
Sandwell and West Birmingham Hospitals NHS Trust	2	Sita HRW	[✂]	Birmingham	Yes	[✂]	No	2011

Source: CC analysis of data provided by the merger parties and customers (hearings and questionnaire responses).

Findings arising from customer tender data

6.50 It is possible to make some general comments regarding the bidding data received from customers.

6.51 The data show both merger parties bid in the areas around Birmingham and Gloucester. There are no examples of switching between the merger parties. SRCL won large NHS contracts from the merger parties in Warrington and Halton (Sita HRW, 2013), Kettering (Polkacrest—now Sita HRW, 2009), Shrewsbury and Telford (Tradebe HRW, 2013), Gloucestershire (Polkacrest—now Sita HRW, 2009). There were two examples where the merger parties ranked one and two in a tender, Hinchingbrooke NHS Trust (2012) and Bristol City Council (2010), although Sita HRW did not bid in a subsequent tender for Bristol City Council in 2012. In all but two of the other tenders, and all since 2006, SRCL finished first or second. We received tender data from nine customers in the areas around Birmingham and Gloucester in which the merger might be expected to have the largest impact.[66] SRCL won five of these nine tenders (56 per cent) with the merger parties winning the remaining four tenders (44 per cent). This share of tender wins is reasonably consistent with the merger parties' market share estimates in paragraph 6.43 for both Gloucester and Birmingham.

6.52 To win a tender process the winner must beat the next best offer. Unilateral effects will be most likely where the parties ranked first and second in tenders merge (in paragraph 6.15 we noted that the most relevant constraint on the pricing power of the most competitive supplier is the cost of service of the second most competitive supplier and the merger is most likely to be harmful in situations where the merger parties were the two most competitive bidders for a customer as this constraint is then removed). Where customers switch contracts from one merger party to the other this will also raise concerns of unilateral effects (since it means the merger parties were strong rivals for that particular customer). The sample of tenders provides a strong indication that SRCL provides the strongest competitive constraint on both Tradebe HRW and Sita HRW. While the merger parties regularly bid in the same tenders, they rarely come up as the two best options for customers, which means that they have not constrained each other's pricing to a significant extent.

6.53 There was no evidence that collection-only companies can compete for LQGs. They have scored poorly on all such contracts. [✂] did, however, win the Lincolnshire Community Services Health Trust tender, a collective SQG contract.

Tenders for which both Tradebe HRW and Sita HRW have bid

6.54 Based on the customer tender data and data provided by the merger parties in response to the market questionnaire, it is possible to identify tenders in which both parties competed in Great Britain. From data provided by the merger parties, we can identify overlaps since 2010. Some customers have provided examples of earlier tenders in which the merger parties overlapped. There are [✂] in total. Further details of the tenders are in Appendix E.

- *Location of overlapping bids*

6.55 The location of overlapping bids may provide some indication of where the merger parties competed pre-merger and the degree of any competitive interaction. We

[66] These customers were located in Gloucester, Birmingham, Staffordshire, Huntingdon and [✂].

collated this information based on customer questionnaire responses and information from the parties relating to their bidding history.

6.56 Most of the tenders were in or around the Gloucester and Birmingham areas. There were three tenders in the Bristol and Bath areas in which both parties competed. These are the edge of the area in which Sita HRW might be expected to be competitive, and potentially on the edge of any Gloucester overlap.[67] These tenders were won by SRCL (North Bristol Trust (2012)) or Tradebe HRW (Royal United Bath (2013), Bristol City Council (2010 but not 2012)). Sita HRW did exert a competitive constraint in one tender[68] but appears to have been unsuccessful in winning substantial tenders in this area.

6.57 There are a limited number of examples of the merger parties bidding against each other in areas outside the Gloucester or Birmingham areas. These examples indicate no more than limited competitive interaction in these areas between the parties:

(a) Tradebe HRW and Sita HRW bid independently for [✂]. This tender is in the area to the east of Sheffield, and is not in the overlap areas shown in Figure 2).

(b) [✂]

- *SRCL*

6.58 SRCL won the greatest number of these contracts and appears to have been particularly successful in winning larger hospital contracts such as the Birmingham Consortium, North Bristol Trust, Shrewsbury and Telford Trusts, and Gloucestershire Trust in recent years. This is consistent with other data which indicates SRCL is in a strong competitive position in all relevant overlaps.

- *HES*

6.59 The data indicates HES has bid in Rotherham, North Staffordshire and Hinchingbrooke. This does not suggest it is bidding in the relevant geographic markets.

SRCL bidding data

6.60 SRCL provided data to the CC regarding its bids in the Sheffield, Gloucester and Birmingham areas since 2011. This contained information on 44 tenders, ten of which were still ongoing. Some of these tenders occurred in the Birmingham and Gloucester areas. Although the data did not include rankings of bidders nor account for all customers in the relevant areas, it was consistent with other information in suggesting SRCL provides the strongest competitive constraint on either of the merger parties.

Conclusions on pre-merger competition

6.61 We assessed pre-merger competition in the Birmingham and Gloucester areas (see paragraph 6.31). SRCL has a strong position in both overlap areas (paragraph 6.58), while Sita HRW and Tradebe HRW account for most of the remainder of customers

[67] See Figure 2, where the 50-mile overlap between the Sita HRW and Tradebe HRW plant extends midway between Gloucester and Bristol.
[68] North Bristol NHS, where Sita came second to SRCL.

and volumes. We consider that GW Butler may exercise only a limited constraint in the central part of the Birmingham area (but may be stronger in the areas between Birmingham and Nottingham), and does not compete effectively in Gloucester (see paragraph 6.34). Grundon appears unlikely to exert a strong competitive constraint in the relevant geographic markets (see paragraph 6.36). We found no evidence to indicate that Veolia would develop into an independent competitor in the short term, but we note that it might have an incentive to change its business model in the future which may allow other competitors to become more competitive (see paragraph 6.40). We do not consider that other competitors, including collection only companies (for LQGs) compete strongly in the relevant geographic markets. A key factor is the location of each competitor compared with customers because of the importance of location on transport costs and SRCL, Sita HRW and Tradebe HRW are usually better placed than other competitors (paragraph 6.42).

6.62 The bidding analysis (paragraphs 6.45 to 6.60) shows that both parties bid in the areas around Birmingham and Gloucester. There were no examples of switching between the merger parties and only two examples where the merger parties ranked one and two in a tender. Our analysis showed that SRCL won the greatest number of tenders and appears to have been particularly successful in winning large hospital contracts in the Birmingham and Gloucester areas.[69] We conclude that SRCL acts as a strong competitor to the merger parties and competed with each merger party substantially more than the merger parties competed with each other.

Effect of the merger

6.63 Having considered pre-merger competition we now consider the effect of the merger on competition. We first focus on the effect of the merger on LQGs and then consider the effect on SQGs. We consider the following factors in our assessment:

(a) the efficiencies from the merger that may be expected to benefit LQG customers (paragraphs 6.65 to 6.73);

(b) the relative cost-competitiveness of different suppliers in the area around Birmingham before and after the merger for supply to LQG customers (paragraphs 6.74 to 6.103);

(c) the impact of capacity in the areas of overlap on competition after the merger (paragraphs 6.104 to 6.113); and

(d) comments from customers about the merger (paragraphs 6.114 and 6.115).

6.64 We separately examined:

(a) the effect of the merger on SQGs (paragraphs 6.116 to 6.126); and

(b) the effect of the merger on coordination (paragraphs 6.127 to 6.130).

Efficiencies expected from the merger

6.65 The parties have argued that the merger would generate significant cost savings. As noted in our guidelines, it is not uncommon for merger firms to make efficiency claims. To form a view that the claimed efficiencies will enhance rivalry so that the

[69] For example, the [✂].

merger does not result in an SLC, our guidelines[70] state that the CC must expect that the following criteria will be met:

(a) the efficiencies must be timely, likely and sufficient to prevent an SLC from arising (having regard to the effect on rivalry that would otherwise result from the merger); and

(b) the efficiencies must be merger specific, ie a direct consequence of the merger, judged relative to what would happen without it.

6.66 Our guidelines also note that we are more likely to take cost savings into account where efficiencies reduce marginal (or short-run variable) costs as these tend to stimulate competition and are more likely to be passed on to customers in the form of lower prices. We will not in general give as much weight to savings in fixed costs because they may often represent private gains to firms and are less important in short-run price formation, although reductions in fixed costs may play an important role in longer-term price formation.[71]

6.67 The parties have argued that the main factor leading to efficiencies would be the internalization of HT waste treatment and redirection of HRW within the JV's facilities. Tradebe HRW and Sita HRW currently outsource a significant share of their HT treatment: Tradebe outsources the bulk of its HT treatment to Veolia in Birmingham, and Sita sends a share of the HT waste it collects in the South-East to [✂] (the rest of the HT waste collected in this area is trucked over long distances to Redditch or Wrexham).[72] The transaction would allow the parties to internalize a larger share of their HT treatment which would allow substantial variable cost savings: Tradebe could use Wrexham to treat HT waste (or Redditch to the extent it is possible to dis-place AT waste), while Sita could potentially use Fawley to treat the waste currently sent to [✂].

6.68 We have assessed this possible source of efficiency against the criteria set out in our guidelines. We note that the efficiencies claimed by the parties are for the business across the UK but we focused on the actions and savings planned by the JV around Birmingham (essentially, the internalization of HT treatment currently outsourced to Veolia) since this is the area most likely to be affected by the merger.

6.69 In our assessment of timeliness we noted that Tradebe does not have any long-term contracts with Veolia for the treatment of HT waste, and Sita has substantial spare capacity at Wrexham HT, so the redirection of waste flows could be implemented without delay. Some redirection of waste has already taken place.[73]

6.70 We also consider the efficiencies are likely. The price charged by Veolia for HT treat-ment is £[✂] per tonne, while the average cost of treating HT waste at Wrexham and Redditch is £[✂] and £[✂] per tonne, respectively (the marginal cost is £[✂] and £[✂] per tonne, respectively). The difference between the costs of the two methods of treatment is observable and substantial, which means that the JV has a strong incentive to implement the change as soon as practicable. The JV can realize the cost saving without any complex operational changes.

6.71 In considering whether the cost savings were sufficient to impact on competition we assessed the relative magnitude of the efficiencies against current market prices.

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[70] *CC2*, paragraph 5.7.4.
[71] ibid, paragraph 5.7.9.
[72] Tradebe submitted an analysis of the efficiencies that would arise from the merger that we reviewed to determine whether it was consistent with our own assessment (see Appendix F).
[73] See derogation approval of 28 January 2014.

Internalizing waste flows would reduce average treatment costs for HT waste by approximately £[✂] per tonne (the difference between the price charged by Veolia and the average unit costs at Wrexham and Redditch) and would increase transport costs by approximately £[✂] per tonne (the difference between the cost of trucking waste from Yardley Green to Veolia and trucking waste to Wrexham or Redditch).[74] This leads to a net reduction in unit costs for HT waste of approximately £[✂] per tonne. If we assume that HT waste represents on average 20 per cent of the total waste mix, this reduces the total unit cost of treating HRW by £[✂] per tonne, or about 8 to 10 per cent of the current market price. This impact is frequently larger than our estimates of the cost differences between the two most competitive bidders (see Tables 8 and 9 below). We have also observed from the tender data provided by customers that the price differential between the two leading bidders (generally SRCL and one of the JV parties) was frequently below 8 to 10 per cent and we would therefore expect the efficiencies to be sufficient to affect competition. In the majority of cases we found that customers would benefit through lower prices because the JV would be able to bid to undercut the existing supplier (in all cases SRCL) to win the customer. The JV would benefit because it would retain the difference between the price it had to bid to undercut the existing supplier and the level of its reduced costs. It would only gain these benefits by winning customers. There will also be a number of cases where, as a result of the merger, SRCL has to bid lower to retain the customer and customers will again benefit through lower prices. We estimated that about two-thirds of the value of the efficiencies created by the merger in the area around Birmingham would be passed through to customers and one-third retained by the JV.

6.72 We also considered that the savings were merger-specific and it is unlikely that these efficiencies could be achieved in other ways, for example through contracting between Tradebe and Sita, by using Fawley to treat HRW, or by Tradebe HRW building its own HT treatment plant:

(a) Integrated suppliers contracting to treat large volumes of another integrated supplier's HT waste over long periods is relatively uncommon, and even if Sita HRW were interested in doing so it would only have an incentive to slightly undercut Veolia, so the effect on the competitiveness of Tradebe would likely be small.

(b) Using Fawley to treat HT waste would generate lower savings for Tradebe HRW. We estimate that using Fawley instead of Veolia to treat HT waste would increase transport costs by approximately £[✂] per tonne. Treatment costs at Fawley would depend on whether it is necessary to displace existing waste, but they are unlikely to be lower than at Redditch or Wrexham.

(c) Our analysis of barriers to entry suggests that the development of new HT plants is relatively lengthy and costly, and that new entry or expansion in the relevant geographic market was unlikely over the next few years (see paragraph 6.165).

6.73 Based on the reasoning in paragraph 6.68, we therefore consider the merger efficiencies are likely to be rivalry enhancing.

Relative competitiveness of suppliers

6.74 In our assessment of the effect of the merger we are concerned to assess the extent to which the merger parties constrain each other in the counterfactual[75] compared

[74] We have used Tradebe's transport model to estimate transport costs between the two options.
[75] We assume the counterfactual is effectively the pre-merger situation.

with their competitors (in particular SRCL). Therefore we gained evidence on how competitive the merger parties were for major customers in the area of 50 miles around Birmingham compared with their competitors by assessing each competitor's cost to supply. We focused on this area because this appeared to be the key overlap with respect to the number of customers potentially affected by the merger.

6.75 There are two key costs involved in servicing a customer: transport costs and treatment costs (paragraph 6.11). To assess these costs we relied on the companies' management accounts, their business plans and their pricing models for recent bids. We put more emphasis on estimates that were used by the companies themselves to inform recent commercial decisions (eg for recent bids or decisions on waste flows). We consider that these cost calculations are a reasonably accurate representation of the costs different suppliers would incur in supplying HRW services to each of the customers we have examined and we have used these calculations to provide an understanding of the competitive positions of different suppliers in this area and to form a view of how the merger would affect competition and pricing.

6.76 As noted in paragraph 6.52 the winner of a tender process must beat the next best offer. Unilateral effects will be most likely where the parties ranked first and second in tenders merge. As noted in paragraph 6.14, we have assumed that the lowest cost supplier will bid below the cost of the next lowest cost supplier to ensure it wins the tender.

6.77 We recognize that suppliers are rated by customers on other aspects besides price which we do not take account of in our calculations. However, once suppliers have got through the PQQ process we assume that the most cost competitive tenderer will win the bid. Our review of recent tenders indicates that price is the most significant driver of tender outcomes, since we found that the lowest cost bidder won all except one tender (Table 6). Further details of our calculations are shown in Appendix F.

6.78 In our assessment we assume that bidders have perfect information on the costs of their competitors, and the most competitive bidder sets its price to undercut the second most competitive bidder. In this context the effect of the merger depends less on the total number of bidders than on their relative cost-competitiveness. The most relevant pricing constraint in a given tender is the second most competitive bidder. The bids of less competitive suppliers have no direct impact on the tender outcome (if, to win the tender, the most competitive supplier sets its price to undercut the second most competitive supplier, the less competitive suppliers are priced out). In this context, the merger is more likely to be harmful in circumstances where Tradebe HRW and Sita HRW are the two most competitive suppliers. In such cases, the merger essentially 'neutralizes' the pricing constraint set by the second most competitive bidder, and the most competitive bidder only needs to undercut the third most competitive bidder. We have designed our model with a view to identifying any such circumstances. Appendix F provides more explanation on this approach.

6.79 We recognize that in practice, suppliers may not have perfectly accurate information about their competitors' costs. However, in most cases they have sufficient market intelligence to identify their closest competitors and the approximate level at which they are likely to bid (probably bidding lower to account for uncertainty). We expect that, when applied to a sufficiently large sample of customers, this approach should identify any pricing pressures arising from the merger, at least in directional terms.

6.80 We have reviewed a range of evidence on bidding strategies in the HRW market. The parties and their competitors told us that they tended to set their prices to cover

their average costs, although they might face incentives to bid below that level under certain circumstances.[76] Our analysis of current market prices and the bidding models used by the parties confirmed that the most common bidding strategy in the HRW market is to set a price covering the average costs of plants. However, we also observed departures from this strategy. In one case we noted that a supplier with a high utilization rate priced a plant at a level above its average cost. Conversely, in two recent tenders we noted that Tradebe HRW and Sita HRW, with significant spare capacity, bid under their average costs.

6.81 Contracts for HRW services are typically entered into for periods of three to five years. In this context, we would not expect suppliers to typically price their services below their average costs in a market with long-term contracts and where parties have finite capacity. If suppliers with spare capacity were to price new contracts at marginal cost they would devote capacity to loss-making contracts and forgo the opportunity to bid for more attractive contracts which might come along in the future. While there may be some instances where suppliers bid below average cost we would expect average cost pricing to be the most common bidding strategy in the HRW market. The evidence detailed in paragraph 6.80 supports this.

6.82 However, given that we observed some departures from this strategy we have assessed two ways of bidding:

(a) In the first, bids were made at the average cost of the plants involved (except for bids from plants that were capacity-constrained, which factored in the opportunity cost of capacity).

(b) In the second, plants with a utilization rate significantly below the market average (under 60 per cent) were priced at the midpoint between their marginal and average cost.

6.83 With the second assumption we did not assume that suppliers would go as far as to bid purely at their marginal cost. While we have found two cases of the merger parties bidding below average cost, we have found no examples of suppliers bidding down to their marginal cost. A bidding strategy based purely on marginal costs could only be sustained for a limited period and/or for a few customers, and would not characterize the nature of competition in this market over a longer time frame.

6.84 We also note that the marginal cost of HT plants are usually lower than those of AT plants. Sita HRW is the only integrated supplier with HT plants in the area so this assumption should result in it being the most competitive bidder for many customers in the counterfactual. This is not consistent with the existing state of competition.

6.85 Our analysis focused on the area of 50 miles around Birmingham. While we were also concerned about a smaller area around Gloucester the area round Birmingham contains the large majority of LQG customers in the overlap areas of concern and we have captured the large majority of customers potentially affected by the merger. We also have reliable information on pre-merger competition in this area. We note that there is only one LQG customer in the Gloucester area, Gloucestershire Hospitals NHS Foundation Trust, which was last tendered in 2009 (see Table 6). This tender was won by SRCL and although it was five years ago supports our view on pre-merger competition, (paragraph 6.62), that SRCL acts as a strong competitor to the merger parties and competes with each merger party substantially more than the

[76] In Appendix F we note that the evidence suggests that the most common pricing strategy is to seek to recover the average cost of production for each plant, although there are some departures from this approach. For further details see the discussion on bidding strategies in Appendix F.

merger parties compete with each other. We also note that the [✂]. and the set of competitors active in this area might also change shortly with the possible entry of Clinipower.

Results based on average cost pricing

6.86 Table 8 below summarizes our results for the 15 NHS trusts we have assessed with average cost pricing. The table shows for each customer the prices calculated for the three most competitive suppliers based on their costs of supplying the customer, where the winning price is set at the level of the second lowest cost. The table shows what the costs would be pre merger (with separate bids from Tradebe HRW and Sita HRW) and then post-merger, where the JV bids for the customer.

6.87 The costs of Tradebe HRW and Sita HRW individually were close to one another, with their costs often being less than 2 to 3 per cent apart. However, both are relatively uncompetitive compared with SRCL. This is because Tradebe HRW needs to outsource HT treatment to Veolia and as a result only wins customers located close to its Yardley Green plant and with a low proportion of HT waste. Sita HRW's Redditch plant is assumed to be capacity-constrained, and its Wrexham plant is relatively expensive and located far away from the main centre of demand.

6.88 The analysis shows that before the merger SRCL would win 13 out of 15 customers, and come second where it does not win. We did not identify any cases where Tradebe HRW and Sita HRW were the two most competitive bidders. This is broadly consistent with what we know about the current level of competition in this market and our analysis of recent tenders (paragraphs 6.45 to 6.60).

6.89 We have used these results to infer whether the merger might lead to an upward pricing pressure in the area. We have considered the results 'in the round' and have not tried to draw strong conclusions concerning the impact on individual customers. Comparisons of our cost calculations with the tender outcomes in Table 6 are complicated by the fact that our calculations are for individual hospitals but tenders are often made to consortia. However, where we have been able to identify locations that tendered individually we found our calculations provided a reasonable match with the supplier that won the tender. Out of the five customers we identified we found that in three cases the tender results were consistent with our calculations. In one case supply to a customer was shared but our calculation showed that SRCL was the lowest cost provider. However, the tender dated from 2001, 13 years ago and before either of the merger parties or SRCL were in their current form. In one other case our calculation did not show the actual winner—Tradebe won the tender and our calculation showed that SRCL was lowest cost. Tradebe told us that in this case it had bid below its average cost. We conclude that our approach provides a reasonably accurate representation of competition in this area.

TABLE 8 **Cost calculations using average cost pricing**

LQG customer	*Pre-merger* *Rank* 1	2	3	*Price*	*Post-merger* *Rank* 1	2	3	*Price*	*Impact*	*Comment*
[✂]	SRCL	Sita HRW	Tradebe HRW		SRCL	JV	GWB			Neutral—no efficiencies
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	Sita HRW		SRCL	JV	GWB			Positive—increased pressure on incumbent
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Tradebe HRW*	SRCL*	GWB		JV	SRCL	GWB			Neutral—efficiencies retained by JV
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Tradebe HRW	SRCL	GWB		JV	SRCL	GWB			Neutral—efficiencies retained by JV
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	GWB		JV	SRCL	GWB			Positive—incumbent displaced
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	Sita HRW		JV	SRCL	GWB			Positive—incumbent displaced
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	Sita HRW		JV	SRCL	GWB			Positive—incumbent displaced
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	GWB		SRCL	JV	GWB			Positive—increased pressure on incumbent
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	GWB		JV	SRCL	GWB			Positive—incumbent displaced
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	Sita HRW		SRCL	JV	GWB			Positive—increased pressure on incumbent
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	Sita HRW		JV	SRCL	Veolia			Positive—incumbent displaced
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	GWB		JV	SRCL	GWB			Positive—incumbent displaced
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	GWB		JV	SRCL	GWB			Positive—incumbent displaced
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Sita HRW	Tradebe HRW		JV	SRCL	GWB			Positive—incumbent displaced
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	Sita HRW		SRCL	JV	GWB			Positive—increased pressure on incumbent
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			

Source: CC analysis.

*Both costs were very close and indistinguishable in practice.
Note: The initials in the table refer to the plants used by the suppliers to service customers: FA is Four Ashes; L is leeds; YG is Yardley Green; T is Tyseley; R is Redditch; N is Nottingham; WAT and WHT are Wrexham AT and HT, respectively. The first letter(s) is the 'primary plant' used to treat AT waste, and the second letter is the 'secondary' plant used to treat HT waste.

6.90 Table 8 also assesses the situation post-merger. If the JV has lower costs following the merger, this can result in the following outcomes:

(a) if Sita HRW or Tradebe HRW was already the lowest cost supplier before the merger the JV would be able to keep for itself any efficiencies resulting from the merger and there will be no benefit to customers; or

(b) if the JV's costs were reduced below those of the existing supplier (in all cases SRCL), the JV would be able to undercut the existing supplier to win the tender. This would result in a lower customer price. The JV would benefit because it would retain the difference between the price it had to bid to undercut the existing supplier and the level of its reduced costs; or

(c) if the JV's costs were lower but still higher than those of SRCL, SRCL would have to bid lower to retain the customer (otherwise the JV would be able to gain the customer). This would also result in a lower customer price.

6.91 Therefore our assessment only assumes price reductions would take place where there was a clear incentive on the supplier to reduce price in order to win business. Our assessment shows the following for the 15 customers in the assessment:

(a) In three cases, the merger is neutral on the tender outcome and price. In one case [✂], the merger does not generate any efficiencies that would allow the JV to use a cheaper option. In two cases [✂], the merger reduces cost, but since Tradebe HRW is the incumbent pre-merger these efficiencies are expected to be retained by the JV.

(b) In eight cases, the merger allows the JV to displace SRCL with a cheaper option (by treating AT waste at Yardley Green and HT waste at Wrexham) and this would lead to a reduction in price.

(c) In four cases, the reduced costs of the JV that result from the merger mean that SRCL would be forced to bid lower to retain the customer and this also leads to a reduction in price.

6.92 The impacts are summarized in Table 9. Our assessment suggests that in the area of 50 miles around Birmingham average customer prices would reduce by over 5 per cent as a result of the merger.

TABLE 9 **Value of rivalry enhancing synergies**

	Number of customers	*Total customer value £*	*Benefit to JV £*	*Benefit to customer £*	*Customer benefit % contract value %*
JV retains any costs savings and no benefit to customers	3	[✂]	[✂]	[✂]	[✂]
JV is able to bid below existing supplier and gains customer from SRCL	8	[✂]	[✂]	[✂]	[✂]
JV's costs are lower following the merger but still higher than SRCL – SRCL has to reduce price to retain the customer	4	[✂]	[✂]	[✂]	[✂]
Total	15	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

6.93 Wrexham HT has higher unit costs than other AT and HT plants in the area, but its costs are materially lower than the price charged by Veolia to treat HT waste, so the JV can realize cost savings by using Wrexham HT instead of Veolia to treat HT waste. After the merger SRCL is less competitive than the JV for these customers

because [✂]. In four cases, SRCL retains the customer but has to bid a lower price (still above its average cost) to avoid losing the customer to the JV.

6.94 We noted in paragraph 6.88 that we had not identified any situations where Tradebe HRW and Sita HRW would be the two most competitive bidders. This suggests that the formation of the JV would not result in price increases. We note that this assessment provides a static description of the relative competitiveness of the different suppliers for individual customers. If the JV were to gain customers its plants may become capacity-constrained, and therefore less competitive. Conversely, if SRCL started losing customers its plants would become less capacity-constrained, and therefore it may bid more aggressively. For this reason these results should not be interpreted as a prediction of price levels or market shares in equilibrium but strongly suggest that the merger would be rivalry-enhancing, and should enable the JV to constrain SRCL more effectively.[77]

6.95 As explained in paragraph 6.78, we assume that the most competitive supplier has perfect information on the costs of the second most competitive supplier and bids at exactly that level. This allows the most competitive bidder to retain any efficiencies it can generate in situations where it is the most competitive bidder pre-merger. The parties said that in reality suppliers had some uncertainty about competitors' costs, and in that context may face a stronger incentive to bid a lower price when their costs are reduced, even where they are the most competitive bidder pre-merger. We accept this argument, but we also note that if the merger reduced the uncertainty faced by the JV (for example, by allowing it to 'pool' the market intelligence owned by the parties, or as a result of the reduction in the number of market participants), then the merger would enhance the ability of the JV to bid strategically. On balance, we recognize that our assumption might understate the degree of pass through in the few cases where Tradebe was the leading supplier pre-merger, but the magnitude of this effect is uncertain, and it is not material to our assessment.

6.96 Our general conclusions are that the results of this scenario are broadly consistent with observed market shares and bidding strategies before the merger, and that they suggest there would not be upward pricing pressure resulting from the merger and there should be downward pressure in many cases.

6.97 The assessment yields some other relevant observations:

(a) [✂] appears to be uncompetitive in the Birmingham area. This is because its treatment costs are relatively high, its plant is located far away from most customers so has high transport costs, and it incurs significant transport and treatment costs to treat HT waste at Tyseley (Tradebe HRW incurs the same treatment costs at Veolia, but its secondary transport costs are much lower since its AT facility is located very close to Tyseley).

(b) The option of entering the market by outsourcing all treatment at Veolia's plant does not seem realistic. This option appears more expensive than the alternatives in all cases. This means that a new supplier wishing to enter the market would need to have at least some AT capacity to be competitive.

Sensitivity assuming spare capacity at Redditch

6.98 As noted in paragraph 6.87, we assume that Redditch is capacity-constrained, both in the counterfactual and in the merger scenario. Redditch already has a high utiliz-

[77] However, we also note that either competitor may be able to invest to increase capacity.

ation rate ([80–90] per cent), and the parties' cost-optimization model suggests that it would be [✂] in the future, both in the counterfactual and with the merger. We expect that this would [✂]. However, Tradebe and Sita said that there might be some scope for displacing some AT waste at Redditch to treat more HT waste without incurring any significant additional costs. We assessed a sensitivity where Redditch was bid at its average cost [✂], both in the counterfactual and with the merger.[78] This shows that the merger has a smaller impact on prices (but still reduces them), because the improved competitiveness of Redditch leads to a significant reduction in prices in the counterfactual (by allowing Sita HRW to win contracts or to become the second most-competitive supplier setting the price), whereas it has little impact on prices in the merger scenario (because the JV is already the most competitive bidder in most scenarios, and any further reduction in costs is simply retained as higher margins).

6.99 Given that we measure the impact of the merger as the difference between prices in the merger situation compared with the counterfactual, the impact is less significant with this assumption. Directionally the impact remains the same: the merger is neutral in some cases and beneficial in others. We have again found no cases where the merger would lead to a price increase. While there is some uncertainty regarding the future utilization of Redditch this does not impact our conclusions significantly.

Results based on 'marginal cost pricing'

6.100 We noted in paragraph 6.89 that Tradebe told us that it bid below average price for a particular customer and we have evidence that Tradebe HRW and Sita HRW have bid below their average cost in another recent tender. As discussed in paragraph 6.80, we assessed an alternative case where plants with a capacity utilization significantly below the market average (under 60 per cent) were priced at the average between marginal and average cost. The pricing of other plants was left unchanged. In practice this affected the pricing of [✂].

6.101 Table 10 below summarizes the results. The results show that the effect of the merger is less favourable than with average cost pricing. The merger has no impact on the price to nine customers as any efficiencies generated are retained by the JV. For three customers, the merger increases price as Tradebe HRW and Sita HRW are the most competitive bidders and the merger removes a relevant constraint on pricing. The merger leads to a reduction in price for three customers.

6.102 If Tradebe HRW and Sita HRW were to adopt a more aggressive pricing strategy in the absence of the JV then they would compete more directly against each other than against SRCL. With these assumptions there are more cases (three) where the effect of the merger would be to remove competition between Tradebe HRW and Sita HRW as the two most competitive bidders, and in these cases the JV would remove a relevant constraint on pricing.

6.103 However, this scenario predicts that Tradebe HRW or Sita HRW would be the most competitive bidder in 11 out of the 15 cases examined. This is not consistent with the current state of competition in the area of 50 miles around Birmingham, particularly the high market share of SRCL that we observe there. To place much weight on this scenario, we would need to believe that competition would be materially different in the counterfactual compared with that pre-merger. More specifically, we would need to assume that Tradebe HRW and Sita HRW bid systematically below their average costs for all customers in the area. As discussed in paragraph 6.81 we do not con-

[78] However, we note that the increased quantities of waste to be processed in the JV may mean it is easier to direct more HT waste to Redditch.

sider that this is a realistic bidding strategy in a market with long-term contracts and where parties have finite capacity. If the merger parties were to continuously bid below their average costs, they would make losses as they became locked into long-term contracts that filled their capacity with unprofitable revenues that were insufficient to cover fixed costs although we recognize that a supplier may bid below its average costs occasionally. Even if we were to assume marginal cost pricing the results, although less favourable than those using average cost pricing, still do not clearly indicate an adverse effect from the merger.

TABLE 10 **Modelling results in the 'marginal cost pricing' scenario**

LQG customer	*Pre-merger* *Rank*				*Post-merger* *Rank*					
	1	2	3	*Price*	*1*	*2*	*3*	*Price*	*Impact*	*Comment*
[✂]	Sita HRW	SRCL	Tradebe HRW		JV	SRCL	GWB			Neutral—no relevant efficiencies
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Sita HRW	SRCL	Tradebe HRW		JV	SRCL	GWB			Neutral—no relevant efficiencies
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Tradebe HRW	Sita HRW	SRCL		JV	SRCL	GWB			Negative—JV removes pricing constraint
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Tradebe HRW	SRCL	Sita HRW		JV	SRCL	GWB			Neutral—efficiencies retained by JV
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Sita HRW	Tradebe HRW	SRCL		JV	SRCL	GWB			Negative—JV removes pricing constraint
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Tradebe HRW	SRCL	Sita HRW		JV	SRCL	GWB			Neutral—efficiencies retained by JV
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Sita HRW	Tradebe HRW		JV	SRCL	GWB			Positive—JV displaces incumbent
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Tradebe HRW	Sita HRW		SRCL	JV	GWB			Positive—JV more effective constraint
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Tradebe HRW	Sita HRW	SRCL		JV	SRCL	GWB			Negative—JV removes pricing constraint
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Sita HRW	SRCL	Tradebe HRW		JV	SRCL	GWB			Neutral—efficiencies retained by JV
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	SRCL	Sita HRW	Tradebe HRW		JV	SRCL	Veolia			Positive—JV displaces incumbent
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	GWB	Tradebe HRW	Sita HRW		JV	GWB	SRCL			Neutral—efficiencies retained by JV
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Tradebe HRW	Sita HRW	SRCL		JV	SRCL	GWB			Neutral—efficiencies retained by JV
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Sita HRW	SRCL	Tradebe		JV	SRCL	GWB			Neutral—efficiencies retained by JV
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			
[✂]	Sita HRW	SRCL	Tradebe HRW		JV	SRCL	GWB			Neutral—efficiencies retained by JV
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
	[✂]	[✂]	[✂]		[✂]	[✂]	[✂]			

Source: CC analysis of bid data.

Capacity

6.104 Plants with significant spare capacity are likely to have strong incentives to compete aggressively to win and retain customers in order to take advantage of economies of scale associated with spreading fixed costs over a larger volume. Plants with little spare capacity are unlikely to compete as effectively for new or existing customers as they face opportunity costs associated with foregoing one customer to service another. If competitors are capacity constrained, they will offer a weaker competitive constraint to the merger parties. Conversely, if there are a number of nearby competitors with significant spare capacity, any market power of the merger parties may be diminished.

6.105 The merger will have no immediate effect on the capacity of most competitors;[79] however, if the merger leads to the JV winning more contracts, competitors will have increased spare capacity.

6.106 We focus our analysis on the areas of 50 miles around Birmingham and a further smaller area around Gloucester as that is where the effect of the merger is likely to be strongest (paragraph 5.30). Tables showing the capacity for HT and AT plants in these areas are shown in Appendix D. Tables of capacity for the Leeds/Sheffield and Manchester areas are provided in Appendix D.

Birmingham

6.107 The JV is planning to redirect waste flows in the group post-merger.[80] Redditch had a relatively high utilization rate in 2012 ([80–90] per cent). There is some uncertainty surrounding the impact of the merger on capacity at Redditch. The cost-optimization model submitted by the parties suggests that the plant might be fully utilized in the future, but there might be some scope to burn more HT waste at the plant if some AT waste is redirected to other plants (see paragraph 6.98 for further discussion of capacity at Redditch). The parties will continue to have [✂] spare capacity at their AT plants in Birmingham and Wrexham, and some spare capacity at the HT plant in Wrexham.

6.108 SRCL has recently doubled the capacity of the Four Ashes plant, [✂]. SRCL told us that it was comfortable with the level of incineration capacity that it had available. When its new AT capacity in Merseyside comes online it will allow it to take some waste that was currently being incinerated but could go to an AT plant, freeing up incineration capacity. It said that once the Liverpool plant came on stream it would have additional freed-up capacity within its system. Based on this, SRCL's operations were unlikely to be substantially impacted by capacity constraints.

6.109 As discussed in paragraphs 6.34 and 6.36, GW Butler and Grundon are unlikely to offer a strong competitive constraint post-merger. We therefore do not consider their capacity situation in detail here. Veolia, New Cross Hospital and potentially Clinipower are the possible other suppliers of HT capacity in the West Midlands apart from Sita HRW:

[79] With the exception of Veolia and [✂] which will have reduced volumes, and therefore increased spare capacity, due to the merger parties internalizing the treatment of HT waste currently outsourced to these plants.
[80] Tradebe has told us that redirection of waste flows depended on various factors. HT plants such as Redditch needed to have a mix of calorific value of waste to burn and must be kept running at full operating temperature at all times between maintenance shutdowns. Consequently, AT waste would be burnt at Redditch if the plant did not have enough HT waste, which may imply the existence of spare HT capacity.

(a) Veolia may have some free capacity post-merger due to the JV internalizing treatment that was previously undertaken by Veolia.

(b) New Cross Hospital also has limited spare capacity. Veolia believed the New Cross plant was old and had poor availability and said that it did not see itself in competition with New Cross.

(c) Clinipower, a new entrant plans to introduce AT and HT spare capacity at Avonmouth in April 2014. It told us it would be pursuing but not focusing on LQGs and intended to concentrate on collection companies, as this strategy was successful for the previous plant owner, Compact Power.[81] However, it also said that the market had consolidated towards one or two large operators with collection and treatment facilities, collection-only companies had been reduced to a small number and it was seeking to bid directly for NHS business. It is some distance from Birmingham, but may be an option for integrated companies seeking HT capacity. However, we note this plant has twice faced financial difficulties under previous ownership[82] and has not yet opened so we treat cautiously the likelihood of sustainable capacity being added by this plant.

6.110 Veolia and New Cross are treatment-only companies. Clinipower is about 90 miles from Birmingham and it said that it was likely to offer HT services within a 75-mile radius (and within a 50-mile radius of their plant for AT waste). Therefore, Veolia, New Cross Hospital and Clinipower were unlikely to offer a substantial competitive constraint in most of the area of 50 miles around Birmingham for LQGs. As discussed above, it does not appear that other integrated and collection companies will offer a substantial competitive constraint in this area. On the basis of capacity SRCL is likely to be the main competitor to the merger parties in the area 50 miles around Birmingham post-merger.

Gloucester

6.111 The JV will have [✂] capacity post-merger at the Avonmouth AT plant. Redditch may be at full capacity post-merger as discussed above and the JV would have to optimize waste flows if it gained customers in the Gloucester area.

6.112 Clinipower (see paragraph 6.109) would be some 34 miles from Gloucester, which is the same as the Tradebe HRW Avonmouth plant and nearer than the nearest Sita HRW plant (Redditch—50 miles) or SRCL plant (Frome—62 miles). However, we treat cautiously the likelihood of sustainable capacity being added by this plant.

6.113 [✂]

Customer comments on the effect of the merger

6.114 We sought comments from LQGs about the effect of the merger. We received 21 responses from LQGs to our questionnaire. Seven customers had no opinion on the merger. Six stated that the merger would be neutral, in the sense that it was unlikely to affect price or quality of service. Four customers had a negative or slightly negative view of the merger, as they feared that further consolidation in the sector may give rise to market power. Four customers had a positive or slightly positive view of

[81] Compact Power did not bid directly for NHS business.
[82] www.letsrecycle.com/news/latest-news/waste-management/avonmouth-pyrolysis-firm-baled-out-by-ethos, www.letsrecycle.com/news/latest-news/waste-management/ethos-recycling-sold-after-entering-administration.

the merger and considered that it could increase professionalism and reduce costs in the industry.

6.115 The majority of customers stated that procuring HRW services through a consortium was the main strategy available to them to exert buyer power. A number of respondents also mentioned procurement hubs and benchmarking as ways to increase information and market intelligence.[83]

SQGs and vertical effects

6.116 This section evaluates the effects of the merger on SQGs. We assess horizontal unilateral effects and possible vertical effects.

6.117 We consider SQGs separately from LQGs because SQGs can be serviced by collection-only companies as well as integrated companies (whereas LQGs can be serviced only by integrated companies). The competitiveness of collection-only companies is contingent on their ability to outsource the treatment of their waste to third-parties on reasonable terms. Tradebe HRW and Sita are suppliers of treatment services to collection-only companies, which means that the merger might have a vertical effect in this segment.

6.118 In principle, there may be two ways in which the merger could harm SQGs:

(a) *Horizontal unilateral effect.* The merger might have a unilateral effect on SQGs if Tradebe HRW and Sita HRW were previously constraining each other to a significant extent in this segment, and if the remaining competition was insufficient to constrain the JV post-merger. We do not consider that this is likely since the overlap between Sita HRW and Tradebe HRW in this segment was limited before the merger (see paragraphs 6.18 to 6.20 and 6.22), and the JV would have a relatively small market share in this segment post-merger.

(b) *Vertical effect.* An alternative theory of harm is that the JV might increase the treatment price charged to collection-only companies (partial foreclosure), or might refuse to treat their waste altogether (total foreclosure). This would make it harder for collection-only companies to compete, which would, in turn, allow the JV to take SQG business from them. We consider this second effect in more detail in this section.

6.119 We first consider horizontal unilateral effects by assessing the competitors active in the SQG segment and the position of the JV compared with competitors (paragraphs 6.120 to 6.122). We then consider the ability and incentive of the JV to foreclose collection-only companies from the SQG market (paragraphs 6.123 to 6.126).

Competitors

6.120 We have identified a number of competitors active in the SQG segment in the relevant geographic markets:

(a) *Integrated companies.* Both Sita HRW and SRCL service SQGs in the areas around Birmingham and Gloucester. Tradebe HRW services a few SQGs, primarily in the area around Bristol, but it told us that it considered the national contracts in the SQG market a potentially attractive area for the merged entity and it would compete for CCGs' work and other SQG contracts.

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[83] Buyer power is considered in paragraphs 6.155–6.164 below.

(b) *Collection-only companies.* There are a wide variety of collection-only companies active in the UK. The largest ones (eg PHS, Cannon, Mitie, Initial) operate on a national level. Many smaller companies operate on a regional level. Most collection-only companies deliver their waste directly to treatment plants, but Initial requires its suppliers of HRW services ([✂]) to collect waste from a number of depots.

6.121 We have collected the following information on the volumes handled by the different suppliers to SQGs:

(a) *Large collection-only companies.* Initial told us that it collected 3,438 tonnes of HRW nationally in 2012. Of this national tonnage, 530 tonnes goes through its Bromford depot in Birmingham. PHS told us that it collected 1,514 tonnes of HRW in the area round Birmingham and Gloucester in 2012.

(b) *Small collection-only companies and local authorities.* These appear to play a marginal role in the overlap areas. Janitorial Direct told us that it collected 15 tonnes in the area around Birmingham in 2012, and [✂] told us that it collected about 20 tonnes around Birmingham and Gloucester.

(c) *Tradebe HRW and Sita HRW.* Tradebe HRW collects approximately [✂] tonnes a year from SQGs, almost entirely in the Bristol area (outside the overlap area). In 2012, Sita HRW's Redditch plant treated 30 tonnes of HRW collected from SQGs in its catchment area. Sita HRW also services SQGs from its other plants.

(d) *SRCL.* In 2012, SRCL collected [✂] tonnes from SQGs for its Four Ashes and Frome plants.

6.122 We conclude that the combined market share of Tradebe and Sita in the relevant area is likely to be smaller than that of collection-only companies, and significantly smaller than that of SRCL. Smaller collection-only companies and city councils appear to play a marginal role in this segment.

Effect of the merger on SQGs

- *Ability of JV to foreclose*

6.123 We identified a number of alternatives that collection-only companies could use if the JV were to increase treatment prices in the relevant geographic markets:

(a) *SRCL.* SRCL supplies collection-only companies, including PHS, Biffa Waste Services, Mitie Waste, and Cathedral Leasings. SRCL is likely to be an effective alternative for national collection-only companies such as [✂] with an SRCL contract. If the JV were to increase treatment prices in the relevant geographic markets, these companies could use SRCL's local plant [✂].

(b) *Treatment-only companies.* There are three treatment-only companies that are active in the area of overlap: Veolia at Tyseley, which treats about [✂] tonnes a year of waste from SQGs and collection-only companies; New Cross Hospital, which grants access to its on-site incinerator in Wolverhampton to a small number of third parties;[84] and Clinipower (see paragraph 6.109), which is specifically targeting collection-only companies. The advantage of using

[84] New Cross Hospital told us that their main third-party customers were: West Midlands Ambulance service, Trust hygiene, Tradebe, Medicare and Wolverhampton City Council.

treatment-only companies is that they face no incentive to foreclose collection-only companies since they have no interest in the collection market. However, we note the caveats in paragraph 6.109 about the likelihood of sustainable capacity being added by this plant.

(c) *GW Butler and Grundon.* GW Butler and Grundon operate treatment plants on the edges of the area of overlap (in Nottingham and Slough, respectively). These plants might be an alternative to the JV for the largest collection-only companies that have the ability to trunk waste in their depot to transport it over longer distances.

Incentive of JV to foreclose

6.124 The JV would have an incentive to foreclose the market if it could be confident that its gains in the retail market would offset its loss in the wholesale market. We considered two factors to assess whether the merger would create an incentive for the JV to foreclose collection-only companies:

(a) *Probability of lost profits from treatment sales.* Tradebe HRW derives [✂] per cent of its turnover from collection-only companies, and [✂] is Tradebe HRW's largest customer, accounting for [✂] per cent of its turnover. We do not have any precise information on the share of Sita HRW's turnover that is derived from collection-only companies, but Sita told us that the total value of its 'delivered' customers was approximately £[✂] million, which represents about 20 per cent of its HRW turnover.[85] Delivered customers include other integrated companies and waste generators that deliver waste directly at Sita HRW's plants, but the majority are collection-only companies. Given that collection-only companies have a number of alternatives to treat their waste, we would expect at least some of them to switch to other suppliers if the JV were to increase treatment prices. While we cannot estimate precisely the size of the resulting loss, it is likely to be significant.

(b) *Probability of increased profits from collection sales.* The JV would face significant competition in the SQG segment, both from integrated companies which have their own treatment plants, and from large collection-only companies which have credible alternatives to treat their waste (eg their [✂] SRCL). In this context we did not consider it likely that the JV could significantly expand its market share in the collection market.

6.125 We conclude that the merger does not create an incentive for the JV to foreclose other SQG suppliers.

Views from collection-only companies

6.126 We received a wide range of views from collection-only companies on the effects of the merger. [✂] and Bristol City Council expressed some concerns that the merger would reduce competition and could make it more difficult to find suitable disposal sites. PHS stated that the merger would allow the JV to compete with it for national customers. PHS also stated that Tradebe HRW might increase treatment prices in areas not covered by its contract, although it believed that it could use its volume to strengthen its bargaining power. Janitorial Direct told us that it did not expect any

[85] Sita told us that its total revenue from collected HRW was £10.5 million, and that its total revenue from both collected and delivered HRW was £13 million.

changes from the merger. Initial told the OFT that it saw the merger as a positive development that would create a stronger competitor to SRCL.

Assessment of coordinated effects

6.127 Coordinated effects may arise when firms operating in the same market recognize that they are mutually interdependent and that they can reach a more profitable outcome if they coordinate to limit their rivalry. The form of this coordination may vary; it could involve firms keeping prices higher than they would otherwise have been, limiting production or innovation, or dividing up the market between them (for example, by allocating contracts among themselves in bidding competitions).

6.128 We received no evidence to suggest coordination was occurring pre-merger and no information from third parties to suggest that it was likely to emerge as a result of the merger. We analysed the characteristics of the market for evidence of the ability to coordinate.

6.129 Asymmetries in capacity, costs, and the locations of plants relative to customers could make it difficult for firms to reach a common understanding on how to allocate customers or set prices. However, if firms could reach terms for coordination, monitoring may be facilitated by the level of transparency in the industry. Evidence from the parties and their competitors suggests they have some knowledge of their competitors' capacity and who holds which contracts. Although firms cannot observe each other's bids, they may have some ability to infer the bids of rivals due to their own participation in tenders and through feedback from customers. Additionally, the reduction in the number of firms may make it is easier for firms to reach the terms of coordination.

6.130 Coordination will be sustainable only where the additional profit from coordination is sufficiently high, and there is an effective mechanism to punish deviation. Individual contracts for HRW services tend to be long term and of relatively high value. The parties and their main competitors will have a substantial degree of spare capacity post-merger. The cost structure of treating HRW means the marginal value of extra volume is substantial. Additionally, the infrequency of contracts makes it more difficult to punish deviation from a coordinated outcome. These factors create a strong incentive for firms to compete to win additional volumes and not to adhere to any coordinated outcome. This suggests that the internal sustainability condition for coordination is unlikely to be met and that the characteristics of the market are unlikely to be conducive to coordination.

Conclusions on the effect of the merger

Efficiencies

6.131 We assessed whether the efficiencies the parties claimed would result from the merger could be expected to enhance rivalry in the area of 50 miles around Birmingham (paragraphs 6.65 to 6.73). We concluded that the efficiencies, largely based on the internalization of HT waste flows, would be rivalry enhancing since they were timely, likely and sufficient to impact on competition. We also considered the efficiencies were merger specific and unlikely to be achieved in other ways.

Cost competitiveness of suppliers

6.132 We focused our assessment on the area of 50 miles around Birmingham because this is where the majority of customers might be affected by the merger. We note

both merger parties have been active in this area and have frequently bid in the same tenders.

6.133 We assessed the relative cost competitiveness of different suppliers before and after the merger for supply to LQG customers (paragraphs 6.74 to 6.103). We gained evidence on the relative efficiency and competitiveness of the merger parties and third parties for LQGs and considered how this would affect future tender processes. Our assessment showed that the most effective constraint on the behaviour of the JV was SRCL. We found that competitors to the JV, other than SRCL, were weak.

6.134 We assessed the impact of suppliers bidding at their average costs and did not identify any cases where, before the merger, Tradebe HRW and Sita HRW were the two most competitive bidders: SRCL was always either the most or second most competitive bidder and the most effective constraint on the JV. As a result, we did not predict any price increases due to the merger. The two other potential suppliers that we assessed ([✂]) failed to exercise significant pressure on the JV in the area of 50 miles around Birmingham because they generally had higher costs.

6.135 Our assessment suggests that the efficiencies generated by the merger through internalizing the treatment of HT waste would reduce the JV's supply costs in the area of 50 miles around Birmingham compared with those of Tradebe HRW and Sita HRW. In the majority of cases these efficiencies would be rivalry-enhancing and would be expected to lead to a reduction in price. In certain cases, where the JV is already the lowest cost competitor, the efficiency benefits resulting from the merger would be retained by the JV because the JV would not need to use them to bid lower to win the customer. However, in the majority of cases we found that a share of these benefits would be passed through to customers in the form of lower prices when the JV retenders for HRW services. This is because the JV would need to reduce price to win the customer. There will also be cases where the JV is still not the lowest cost supplier but SRCL is forced to bid lower to retain the customer because the costs of the JV as the second lowest cost bidder are lower as a result of the JV. This means that the merger enables the JV to compete more effectively with SRCL than Tradebe HRW and Sita HRW separately. Customers in the overlap areas are likely to benefit because not only is SRCL likely to effectively constrain the JV post-merger, but the JV will also be a more effective constraint on SRCL. Our assessment suggests that the overall effect of the merger efficiencies would be to reduce customer prices in the area of 50 miles around Birmingham by over 5 per cent on average.

6.136 We also assessed the impact of suppliers bidding at below their average cost and recognized that there may be particular circumstances that cause a supplier to bid below its average cost in a particular tender. The results, although less favourable than with average cost pricing, did not clearly indicate an adverse effect from the merger. We did not think it was realistic to assume that this would be the normal bidding strategy for suppliers since the supplier would become locked into unprofitable long-term contracts.

6.137 We conclude that the merger, although removing the rivalry between Tradebe HRW and Sita HRW, would not negatively affect competitive outcomes for LQG customers and in many cases would be expected to increase rivalry with SRCL in the area of 50 miles around Birmingham.

Capacity

6.138 We assessed the impact of capacity on competition (paragraphs 6.104 to 6.113). There appears to be adequate AT capacity within the JV to allow it to redistribute waste flows to increase its competitiveness and to compete more strongly with SRCL

in the relevant geographic market. There is some uncertainty regarding the JV's ability to use Redditch to treat more HT waste, but our main conclusion that the merger would not raise prices is robust to different assumptions about the effect of capacity constraints at Redditch . SRCL is unlikely to be capacity constrained post-merger. The new Clinipower plant at Avonmouth, if it is successful in entering the market sustainably, might provide additional competition in Gloucester to the JV and SRCL.

Customer comments

6.139 We considered customers' comments about the merger and noted that the weight of customer opinion suggested that the impact of the merger would be broadly neutral.

Impact of the merger on SQGs

6.140 We examined the impact of the merger on SQGs and the possibility for vertical effects to occur (paragraphs 6.116 to 6.126). The combined market share of Tradebe HRW and Sita HRW in the Birmingham and Gloucester areas is smaller than that of many collection-only companies, and significantly smaller than that of SRCL. The JV would have a relatively small share in this segment post-merger and we conclude that the risk of unilateral effects for SQG customers is low.

6.141 Collection-only companies have a range of alternatives to the JV to treat waste in the area of overlap.[86] We conclude that the merger does not create an incentive to fore-close collection-only companies due the strength of competitors to the JV, both in the treatment and the collection part of the market.

Coordinated effects

6.142 We examined the possibility of coordinated effects occurring as a result of the merger (paragraphs 6.127 to 6.130). We did not receive any evidence to suggest that co-ordination is occurring now or is likely as a result of the merger. We consider the characteristics of the market are unlikely to be conducive to coordination. Based on this evidence, we conclude that coordinated effects were unlikely to occur as a result of the merger.

Countervailing factors

Entry

6.143 We considered whether entry or expansion by competitors of Tradebe HRW and Sita HRW would be timely, likely and sufficient to reduce or prevent an SLC.[87] We have only considered entry, expansion and relocation of treatment plants as we do not consider that entry of a collection-only company would constrain the JV and we have not found that collection-only companies compete for LQGs or were planning to open treatment plants.[88] Recent examples of entry into HRW treatment are shown in Appendix G.

6.144 Key entry barriers are:

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[86] However, we note that some of these alternatives may be more easily accessible to large companies than to small companies.
[87] *CC2*, section 5.8.
[88] [✂]

(a) There are two key regulatory requirements before a new treatment plant can operate: obtaining the necessary permit from the EA to process and dispose of waste; and obtaining planning approval for the construction of any new facilities. The time to obtain an EA permit for the examples of entry in appendix G ranged from four to nine months for AT plants and from 14 to 15 months for HT plants.

(b) Planning permission can be a significant barrier to entry,[89] although planning permission appears to be easier to obtain for an AT plant than an HT plant.[90] The time to obtain planning permission for the examples of entry detailed in Appendix G was 4 to 12 months for an AT plant and could be several years for an HT plant.

(c) There is also the capital cost of building a new treatment plant, including gaining planning permission and permits, site preparation and equipment (purchase, delivery and installation). Parties told us that an AT treatment plant would cost between £0.5 million and £3.5 million depending on the size and complexity. The cost for the examples of AT entry detailed in Appendix G ranged from £1.25 million to £3 million. Parties told us that an HT incinerator would cost between £5 million and £10 million depending on the size and complexity. The costs of entry can be lower where the hospitals own treatment sites and lease these to HRW service providers as part of their supply contracts.[91]

Barriers to expansion

6.145 Theoretically it may be possible to expand an existing plant to increase capacity. However, to expand an HT plant the boiler and major processing equipment would need to be replaced. This would result in the same regulatory and cost barriers set out in paragraph 6.144, unless the site already had planning permission and/or an EA permit for a larger plant (in which case these may not be required).

6.146 It appears to be more practical to expand an AT plant. An extra line would need to be built, space permitting and subject to the site's ability to handle the increased traffic resulting from a larger number of vehicles servicing the site. SRCL told us that the cost of the new equipment would be approximately £[✂] million while Tradebe estimated costs of between £400,000 and £800,000. Expansion of an AT plant would also require a variation to site permit. Tradebe told us that it would take between 6 and 12 months for a new line to be operational.

Barriers to relocation of an existing plant

6.147 Relocation of a treatment plant would result in the same regulatory barriers as set out in paragraph 6.139 above, unless the new site already had planning permission and/ or an EA permit. SRCL is [✂]. In general relocation of an existing AT plant takes less time than is required for relocation of an HT plant. SRCL told us that it takes three to four weeks to relocate an AT plant, while it can take several months to move an HT plant.

[89] Veolia told us that planning was a substantial barrier especially if a new non-waste-related site has been chosen.
[90] GW Butler told us that there were often public objections to opening an incineration plant.
[91] For example, as detailed in the Initial Submission, paragraph 6.19*(b)*, Tradebe's Yardley Green site is owned by the NHS acute trust, the Heart of England, and forms part of the contract for services to this trust and so the tender for this contract is open to all undertakings regardless of whether they own facilities in the Birmingham area.

Consortium contracts

6.148 Consortium arrangements have been utilized by NHS organizations to procure HRW services. Given the high value of consortium contracts they may incentivize new entry. Tradebe told us that in recent years the trend towards NHS consortium contracts had increased opportunities for new entry.[92] Two successful examples of this type of entry (SRCL in Merseyside and HES in Yorkshire) and an unsuccessful example of this type of entry (Tradebe HRW in Bristol) are detailed in Appendix G.

6.149 In order to result in the potential for new entry a contract needs to:

(a) *Be long term*—North of England Commercial Procurement Collaborative (NOECPC) told us that NHS contracts for HRW were generally for between five and ten years. In the case of the Yorkshire contract it anticipated that suppliers would be building a new plant and would therefore require a contract length of at least seven years to make that viable.

(b) *Be of significant annual value*—Tradebe told us that a contract for at least 2,500 to 3,000 tonnes a year may attract new entry. NOECPC said that a contract for 3,000 tonnes a year and above may allow a new AT plant to be built. However, SRCL said that the contract would need to be 4,500 to 5,000 tonnes a year and HES told us that a contract needed to be at least 6,000 tonnes to justify building a new plant.

(c) *Allow a sufficient lead time*—for example, HES told us that the lead time between the award of the Yorkshire consortium contract and the contract start was nine months, which allowed HES time to secure approval and construct its plant (see further Appendix G).

6.150 Contracts that are not consortium contracts are unlikely to be of a sufficient size to incentivize entry. Tradebe estimated the tonnage of a potential contract using a ratio of 0.8 tonnes per year per bed. The largest acute trust in the country, Barts Health NHS Trust, has 2,150 beds,[93] therefore the estimated annual tonnage for this organization is 1,720 tonnes. This is significantly lower than the minimum size needed to incentivize entry (see paragraph 6.149 above).

Analysis of whether entry or expansion in the relevant geographic markets would be timely, likely and sufficient

6.151 In order to assess the potential for entry or expansion in the relevant geographic markets we first identified consortium contracts within 100 miles of either Birmingham or Gloucester and then considered whether the annual tonnage of these contracts and the date the contracts were expected to be tendered would incentivize timely entry or expansion (see Table 11).

6.152 We noted that the tender processes for the Wales and Northern consortium contracts are expected to commence during 2014 but did not consider that any new entry as a result of these contracts would be close enough to the relevant geographic market to prevent any SLC.

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[92] Initial submission, paragraphs 3.15 & 3.1(b).
[93] www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-day-only/.

TABLE 11 **Consortium contracts in the Birmingham and Gloucester areas**

Consortium	*Within 100 miles*	*Comments*
West Midlands Consortium	Birmingham, Gloucester	This consortium is led by University Hospitals Birmingham. In September 2013 the contract with SRCL was extended for a further five years from April 2014. The total annual tonnage for this contract is 5,000 tonnes.
Healthcare Purchasing Consortium (now Health Trust Europe)	Birmingham, Gloucester	This is a framework utilized by five organizations, not a consortium, each organization tendered for its HRW services separately.
Northampton Consortium	Birmingham, Gloucester	The total annual tonnage for this contract is 1,171 tonnes.
Oxford Consortium	Birmingham, Gloucester	The total annual tonnage for this contract is 1,533 tonnes.
Bedfordshire Consortium	Birmingham, Gloucester	The total annual tonnage for this contract is 1,560 tonnes.
Merseyside Consortium	Birmingham	SRCL was awarded a three-year contract from April 2013 (see Appendix G).
United Lincolnshire Consortium	Birmingham	United Lincolnshire Hospitals and Doncaster and Bassetlaw Hospitals used the same tender process but each organization awarded separate contracts to separate companies.
Bolton Consortium	Birmingham	The total annual tonnage for this contract is 2,742 tonnes, although the members of the consortium are located approximately 90 miles from Birmingham.
Oldham Consortium	Birmingham	The total annual tonnage for this contract is 1,914 tonnes.
Somerset and Dorset Consortium	Gloucester	The total estimated annual tonnage for this contract is 829 tonnes.
London Procurement Partnership	Gloucester	This organization provides procurement support and access to framework agreements but each member organization procures its HRW services separately.

Source: CC analysis of list of contract renewals data provided by Tradebe.

6.153 We have not identified any consortium contracts within 100 miles of Birmingham or Gloucester that on their own could incentivize entry within the next few years. We noted that Heart of England NHS Foundation Trust is currently tendering for HRW services from 1 April 2014. However, the annual tonnage for this contract (approximately 1,300) is unlikely to be sufficient to support entry in itself. However, the contract and site may attract a new supplier of HRW services if they were confident of attracting additional tonnages from other customers.

6.154 Tradebe told us that: 'the volume of HRW produced in the Gloucester area is not sufficient to incentivise further new entry purely to service Gloucester in the short to medium term'. SRCL told us that it did not expect new entry in the Gloucester or Birmingham areas in the next few years and Veolia told us that there were no imminent contracts to be tendered in the Birmingham area that would be of sufficient size to support new entry.

Countervailing buyer power

6.155 An individual customer or group of customers may be able to use its negotiating strength to limit the ability of a merged firm to raise prices or reduce quality. This is referred to as countervailing buyer power. A number of factors can influence buyer power. A customer's negotiating position will be stronger if it can easily switch its demand away from the supplier. The threat of switching will be more effective if there are several alternative suppliers, if the customer can sponsor or facilitate new entry, or if the customer can self-supply. The threat of switching will also be more effective when switching costs are low. A customer may also be able to constrain pricing by

imposing costs on the supplier, for example by delaying purchases or credibly threatening to stop buying other services from the supplier.

6.156 In our wider assessment of competitive effects we have analysed the relationship between LQG customers and suppliers in this market. We noted in paragraph 6.10 that individual contracts are of substantial value in relation to the size of a supplier and consortium contracts combining several NHS trusts can be much larger. Customers exercise their buyer power primarily by using tendering to let contracts which are large and long-term. However, sellers retain some market power because the lowest-cost supplier does not need to bid at marginal cost, only to bid below the best offer of its higher-cost competitors.

6.157 We focus in this section on whether LQG customers in Birmingham or Gloucester would have sufficient countervailing buyer power to mitigate any adverse effects of the JV. The effect of customers' use of tendering process and the ability of different suppliers to compete is built into our analysis of competitive effect elsewhere in the report. This section considers whether there are any other factors in the HRW market that could strengthen buyer power for LQGs following the merger.

6.158 This merger reduces the number of suppliers available to customers in the relevant geographic markets. The evidence collected as part of the competitive assessment suggests that SRCL is likely to be the only competitive alternative supplier for LQGs in these areas. Therefore LQGs have limited alternative suppliers available to them and the number has fallen as a result of the merger.

6.159 Regulatory requirements oblige customers to dispose of HRW in an appropriate manner. HRW services are a 'must-have' item for customers, and they cannot credibly threaten to impose costs on suppliers by delaying or not purchasing HRW services.

6.160 A number of customers have plants on site, but very few mentioned building a new plant as an option to increase their buyer power. Therefore, self-supply does not appear to be a credible source of buyer power for most customers.

6.161 The ability to facilitate entry is one potential route through which customers could exert buyer power and resist price increases. However, as noted in 6.153 we have not identified any consortium contracts which would incentivize entry in the relevant geographic markets in a suitable time frame.

6.162 If buyer power could feasibly be enhanced by joining a consortium or lengthening contracts, then customers might be expected to have done so pre-merger. Therefore even if customers have some buyer power, the net effect of the merger may be to reduce it. However, if customers were not using all strategies at their disposal to enhance their buyer power, they might be able to use these strategies post-merger to resist price increases. Without a strong ability to credibly switch supply to a number of alternative suppliers or impose costs on suppliers, aggregating volume alone is unlikely to create countervailing buyer power.

6.163 Customers had mixed views on the impact of the merger on their bargaining power. A number of customers (eg Kettering, [✂], North Staffordshire) identified large volumes and/or consortia as strategies which could be or are used to increase bargaining power. Some thought their bargaining power would be unaffected (eg North Staffordshire, [✂], Hinchingbrooke, [✂]). Others were unsure of the impact of the merger on their bargaining power (eg University Hospital Birmingham, Kettering). A smaller number said their bargaining power may be reduced (eg Weston Area Health trust—although neither party bid at the most recent tender for this customer).

A number of respondents also mentioned procurement hubs and benchmarking as a way to increase information and market intelligence.

Conclusions on countervailing factors

6.164 We note that whilst entry is costly and takes time, barriers to entry are not insurmountable as there are examples of entry of both HT and AT plants in the last five years. Expansion and relocation of treatment plants is also possible although we have seen fewer examples of these.

6.165 We have not been provided with any information indicating that a party has plans to enter or expand in the relevant geographic markets in the next few years and did not identify any consortium contracts which would incentivize entry in these areas in the next few years. We have not found evidence that entry or expansion in the relevant geographic markets is timely, likely or sufficient to constrain any potential adverse effects of the JV on supply of HRW services in these areas.

6.166 Customers have limited ability to threaten to switch post-merger. They also have limited ability to impose costs on suppliers (such as by delaying purchases or credibly threatening to stop buying other services from the supplier). Finally there are limited prospects for new entry facilitated by consortia in the relevant geographic markets. We conclude that buyer power (beyond the buyer power already built in to the bidding process which ensures that a proportion of efficiency savings are passed on to customers) is unlikely to act as a countervailing factor that would mitigate any adverse effects of the JV for LQG customers in the relevant geographic markets.

Conclusion on competitive effects

6.167 We assessed pre-merger competition, assessing the effective catchment areas of plants, the customer portfolios of parties and an analysis of tender bids in the relevant geographic markets. SRCL has a high market share in the relevant geographic market and Sita HRW and Tradebe HRW account for most of the remainder of customers. We do not consider that other competitors, including collection-only companies (for LQGs) compete strongly in the relevant geographic markets. While the merger parties regularly bid in the same tenders, they rarely come up as the two lowest-price bidders, which means that they do not constrain each other's pricing to a significant extent. SRCL won the greatest number of tenders and competes with each merger party substantially more than they compete with each other.

6.168 We gained evidence on the relative efficiency of competitors in the area 50 miles around Birmingham and assessed how the merger would affect future tenders. We concluded that the most effective constraint on the behaviour of the JV was SRCL. We found that competitors to the JV other than SRCL were weak.[94] This, and the pre-merger market shares (SRCL's market share in this area is approximately [60–70] per cent and the combined market share of the merger parties is [30–40] per cent), indicated that the merger would reduce the number of effective competitors in the area from three to two, although this does not take account of the importance of a supplier's location relative to the customer on its competitiveness.

6.169 We would usually be extremely concerned about the effect on competition and choice of a three-to-two merger. In the circumstances of this case we found there were two important factors that alleviated our concerns. The first is the strength of

[94] Although we note that there is some uncertainty regarding the future role of Veolia in this area.

SRCL as a competitor to the JV. We did not identify any cases where Tradebe HRW and Sita HRW were the two most competitive bidders: SRCL was always either the most competitive or the second most competitive bidder and the most effective constraint on the behaviour of the merger parties. As a result, we have not predicted any price increases due to the merger.

6.170 We recognize that this is a static view and that the counterfactual assumes that Sita HRW would be owned by someone other than Sita. It is possible that an alternative owner might improve the efficiency of Sita HRW to make it more competitive. However, the second factor is that our assessment suggests that the efficiencies generated by the merger will have a significant impact on the ability of the parties to bid competitively in future tenders in the relevant geographic markets and will be rivalry-enhancing. These efficiencies would not occur in the counterfactual. In our view, it is reasonable to assume that the JV can increase its efficiency by internalizing the treatment of HT waste. The realization of these efficiencies, which appear to be timely, likely and sufficient to impact on competition, relies on a small number of simple changes in waste flows with well-identified costs and benefits.

6.171 We also consider that there are good reasons to assume that a substantial share of these efficiencies will be passed through to customers as lower prices when the JV retenders for HRW services, because the JV will need to bid a lower price to win customers from SRCL. The JV would benefit because it would retain the difference between the price it had to bid to undercut the existing supplier and the level of its reduced costs. It would only gain these benefits by winning customers. The JV will also increase pressure on SRCL to reduce price to retain some customers. Therefore not only is SRCL likely to effectively constrain the JV post-merger, but the JV will also be a more effective constraint on SRCL. Our assessment suggests that the overall effect of the merger efficiencies would be to reduce average customer prices by over 5 per cent in the area of 50 miles around Birmingham. We conclude that the JV should not be expected to increase prices and is likely to reduce prices for many customers.

6.172 We also assessed the effect of the merger on SQGs and concluded that it was unlikely to affect adversely SQGs. We also concluded that the merger is unlikely to enable or result in increased coordination.

6.173 We assessed countervailing factors. We conclude that entry or expansion in Birmingham or Gloucester would not be timely, likely or sufficient to constrain any potential adverse effects of the JV on supply of HRW services in these areas. We also considered that buyer power would be unlikely to act as a countervailing factor to affect the present balance of power between buyers and sellers sufficient to mitigate any possible adverse effects of the JV.

7. Conclusions on the SLC test

7.1 We have assessed the competitive effects of the merger in the Birmingham and Gloucester areas. We conclude that due to the strong position of SRCL, the merger-specific efficiencies which we expect would result in significant price reductions, and the fact that while the merger parties regularly bid in the same tenders, they do not constrain each other's pricing to a significant extent, the JV would not be likely to give rise to an SLC in any market in the UK.