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**REFUSE COLLECTION**

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**Responsible Cabinet Member - Councillor Nick Wallis,  
Leisure and Local Environment Portfolio**

**Responsible Director - Richard Alty, Director of Place**

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**SUMMARY REPORT**

**Purpose of the Report**

1. The purpose of this report is to ask Members to consider collection arrangements for residual household waste and introduce a wheeled bin service.

**Summary**

2. Darlington Borough Council is one of only 9% of waste collection authorities across the UK that operate a dedicated black sack collection system and a number of the remaining authorities are converting to a wheeled bin service. As part of the ongoing review of all services across the Authority, consideration has been given to the collection of household waste and whether or not to move to a wheeled bin service.
3. The majority of collection authorities across the country use wheeled bins as they have a number of benefits including:
  - (a) Reduction in street litter through containment of refuse
  - (b) Can control the amount of waste put out for collection therefore controlling treatment/disposal costs
  - (c) Will encourage residents to participate in recycling scheme as there is only limited capacity of a wheeled bin
  - (d) Provide a facility for residents to store refuse
4. There are also significant health and safety benefits from the introduction of wheeled bins, particularly around manual handling and to cut/needle stick injuries, which the Council needs to consider when analysing all the evidence available and any financial implications.
5. In addition, should Members agree to introduce a wheeled bin service there would be greater opportunity to collaborate with other Tees Valley authorities as they all utilise wheeled bins for residual waste collection.
6. The implementation of a wheeled bin service requires the procurement of containers and vehicles including the modification of existing vehicles. The total value of goods to be

procured is £1,435,000, as detailed in paragraph 48.

7. The Contract Procedure Rules require all tenders over £75,000 should be presented to Cabinet to determine if they are strategic or non-strategic, based on previously agreed criteria the procurement of wheeled bins is deemed to be strategic therefore a further report will be brought back to Cabinet on the provision of wheeled bins. (see **Appendix 4**).

### **Recommendation**

8. It is recommended that :-
  - (a) Wheeled bins are introduced across the Borough and an allocation of £314,000 per annum be made within the MTFP
  - (b) One-off allocation of £60,000 be included within the MTFP for this financial year 2012/13
  - (c) The policies contained in this report at paragraph 47 be adopted for the implementation of wheeled bins.
  - (d) The Director of Place is authorised to apply for funding from the Government's Weekly Collection Support Scheme.
  - (e) A further report is brought back to Cabinet on the procurement of wheeled bins.

### **Reasons**

9. The recommendations are supported by the following reasons :-
  - (a) Release of funding into the MTFP to enable wheeled bins to be implemented
  - (b) One-off funding allocation to employ additional resources for the implementation period of wheeled bins
  - (c) Need to implement agreed policies for the smooth operation of the wheeled bin service.
  - (d) To facilitate enhancements to the waste collection service.
  - (e) To enable Members to consider the procurement strategy for wheeled bins.

**Richard Alty**  
**Director of Place**

### **Background Papers**

No Background papers were used in the preparation of this report.

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S17 Crime and Disorder	It is not considered that there will be a significant impact on crime and disorder as a result of this report, however on occasions wheeled bins have been used in other areas to assist in criminal activity. In addition, a number of secondary fires are a result of refuse and other household waste being left out for collection either loose or within wheeled bins.
Health and Well Being	By providing this efficient refuse and recycling collection system does have a positive impact on the health and well being of residents.
Carbon Impact	It is anticipated that there may be an increase in recycling as a result of introducing wheeled bins by reduced capacity therefore this could potentially have a positive impact on carbon output.
Diversity	The collection system will be universal across the Borough and the Council's existing Assisted Collection policy will continue where individuals because of their personal circumstances are unable to place the wheeled bin out for collection.
Wards Affected	All Wards will be affected.
Groups Affected	The refuse collection service will operate across the Borough, providing the same service to all residents therefore there is no particular impact on any one group.
Budget and Policy Framework	There will be a financial impact on the MTFP of £374,600 in 2012/13 and £314,600 per annum thereafter.
Key Decision	This is considered to be a key decision as it will have impact on all residents as they will need to utilise the wheeled bin provided.
Urgent Decision	This is not classed as an urgent decision.
One Darlington: Perfectly Placed	The implementation of a wheeled bin service does not particularly impact on the Council's Sustainable Community Strategy, though will reduce litter and improve the environment in that way.
Efficiency	Wheeled bins provide the opportunity for containment of refuse and therefore there will be efficiencies with regard to street cleansing.

## MAIN REPORT

### Information and Analysis

#### Existing Collection Arrangements

10. In July 2008, Cabinet considered options for the Recycling and Composting Strategy that would tie into the new waste management contract, which commenced in April 2009. Members considered four options that were presented and agreed on implementing the collection arrangements that are in place today, which are:
  - (a) Residual refuse, black sack, kerbside
  - (b) Glass, green box
  - (c) Paper/Card, blue sack
11. These arrangements have been in place since September 2009 and have worked well since their implementation. For the financial year 2010/11, the Council achieved a 42% re-use/recycling/composting rate.
12. For refuse collection, on average 85 tonnes of refuse is collected daily by 12 Street Scene operatives. This equates to approximately 7 tonnes per day per employee or 35 tonnes per week per employee.

#### Existing Revenue Costs

13. The existing revenue costs for the refuse collection service are approximately £1.287 million excluding management and administration account and support service recharge costs. The service includes household black sack collection, trade waste, bulky household collections and household clearances on behalf of Housing. From a benchmarking point of view when comparing our performance against the family group as part of the Association of Public Service Excellence (APSE) Performance Network's data from 2010/11, the costs of refuse collection service per household, places Darlington as one of the best performers.

#### Health and Safety Inspection

14. The Health and Safety Executive (HSE) are currently undertaking a three/four year programme, visiting every local authority in the country to review their arrangements for refuse and recycling collection; the main reason being that the waste industry reports around 4,000 accidents each year, of which there is an approximate 50/50 split between private companies and local authorities. The overall accident rate for the waste industry is around 2,500 per 100,000 workers; this is nearly five times the national average.
15. Darlington, along with Hartlepool, North Tyneside, Newcastle and Durham, were in the first round of visits within the north east. An initial meeting was held with the HSE on 19 January 2011 with a subsequent visit to observe refuse and recycling collection on 10 March 2011 and a follow up meeting on 20 May 2011.

## **Outcome from Inspection**

16. Firstly, the inspection was both useful and informative and by working together with the HSE, can only assist in improving overall safety within refuse and recycling collection as well as Street Scene as a whole.
17. As a result of the inspection, the HSE have identified a number of issues that require further attention as detailed in their letter to us of 3 May 2011, attached as **Appendix 1**, and attached as **Appendix 2** is our response.
18. These issues, alongside other areas of work with regard to health and safety for Street Scene have been put into one action plan that is currently being worked through.
19. As can be seen from management's response, (d) 'Reversing Assistants', (e) 'Noise levels during glass collections' and (f) 'Reporting of injuries, diseases and dangerous occurrences regulations 1995' have either been solved or are well on their way to being resolved. For (c) 'Risk assessment of collection route', work is ongoing and will ultimately need to tie in to any changes to the existing collection arrangements.
20. Therefore, the two main areas that need further consideration are (a) 'Manual handling of refuse in bags' and (b) 'Presence of sharp objects in bin bags'.

## **Manual Handling Implications**

21. Musculoskeletal disorders (MSDs) affect muscles, joints, tendons and other parts of the musculoskeletal system. They have been identified as the UK's most common cause of occupational ill health, affecting 1.1 million annually at a cost of £5.7 billion. An estimate of 12.3 million working days are lost due to work related MSDs.
22. HSE reports that back injuries account for 23% of all injuries sustained in the waste and recycling industry.
23. The Manual Handling Operations Regulations, Regulation 4(1)(a) states that the need to undertake any manual handling operation which is likely to involve a risk of injury should be avoided in so far as reasonably practicable. Where manual handling cannot be avoided, steps should be taken to reduce the risk of injury to the lowest reasonable practicable level.
24. The hierarchy of control:
  - (a) Eliminate the task
  - (b) Mechanise
  - (c) Mitigate/design
  - (d) Train/safe systems of work
25. With regard to (a) and (b), eliminating the task or mechanising, this would be achieved by introducing wheeled bins. For (c) and (d), this would be achieved by changing the system of work, which could be to reduce the amount of rubbish lifted per operative, putting in more robust supervision and enforcement to ensure staff operate to safe systems. However, although this may mitigate some of the manual handling risks, it will not take away the risk

of puncture/needle stick injuries.

26. The HSE has taken particular interest in the waste management industry because in terms of accident rates in 2001/02:
  - (a) The overall accident rate for the waste industry was estimated to be around 2,500 workers per 100,000, which is almost five times the national average.
  - (b) The fatal injury accident rate for the waste industry was estimated to be around 10 per 100,000 workers. This is ten times the national rate.
  - (c) The major injury accident rate for the waste industry was estimated to be 330 per 100,000 workers. This is more than three times the national rate.
27. An update on the previous report has now been published, which covers an additional four years up to 2005/06. The findings generally show that from the height of fatalities of approximately 10 per 100,000 workers in 2001/02, it dropped significantly in 2003/04 but then stabilised for 2004/05 and 2005/06 at 8 per 100,000.
28. The Health and Safety Laboratory (HSL) has produced two reports specific to the waste and recycling industry to help carry out a manual handling risk assessment. These reports are:
  - (a) In 2002, 'Manual Handling in Refuse Collection'
  - (b) In 2006, 'Manual Handling in Kerbside Collection and Sorting of Recyclables'
29. Although there are a number of recommendations coming out of these two research studies, the three key recommendations to consider for containment of refuse/recycling collections and minimising musculoskeletal disorder injuries are:
  - (a) Wherever possible, refuse collection should be carried out using wheeled bins of appropriate size rather than bags or small dustbins.
  - (b) Previous research suggests that the use of wheeled bins reduces the risk of manual handling injuries compared to handling non-wheeled bin containers therefore where possible it should be more appropriate to use wheeled bins for the collection of recyclables.
  - (c) Where boxes are used, reduced the capacity of the box to at most 40 litres to provide a method of waste control.
30. The Authority's existing risk assessment for refuse and recycling collection identifies use of wheeled bins as a further control measure to reduce manual handling.
31. Previously when reviewing the risk assessments, although wheeled bins were identified as a potential further control measure, it was never introduced. The reason for this was that it was believed that existing control measures within the risk assessment were adequate so far as is reasonably practicable, however the HSE are now challenging this and do not believe that we have taken adequate steps that are reasonably practicable.

## UK Local Authority Collection Arrangements

32. There are 402 collection authorities within the UK, of which only 37 (9%) operate a dedicated black sack collection service (a list of authorities who responded to a survey sent out by Darlington Borough Council is attached as **Appendix 3**). Some authorities who operate wheeled bins will have a limited number of properties on black sacks but this information is not available.
33. Alongside refuse collection, 180 local authorities have some form of sack collection for recycling; however the materials collected in a sack tend to be lighter than for general refuse and are unlikely to cause needle stick/puncture wounds. Also as not all properties participate in recycling schemes, the frequency of manual handling is reduced.

### Options Available to DBC

34. There are a number of options available to the Council:
- (a) Do nothing and remain with existing service
  - (b) Increase the operatives on each refuse collection round or increase number of rounds
  - (c) Introduce wheeled bins across the Borough to replace the black sack collection
35. Below is each option with a summary of what is involved and a list of advantages and disadvantages, financial implications and an assessment against HSE requirements.

#### Option A – Do nothing and remain with existing service

36. As stated previously, the existing collection arrangements for refuse and recycling were introduced in September 2009 to tie into the new waste management contract. These arrangements have worked reasonably well, providing one of the most efficient and cost effective refuse collection services across the country.

<b>Advantages</b>	<b>Disadvantages</b>
No change to refuse collection arrangement for residents.	Increases likelihood of musculoskeletal disorder and cut/puncture injuries to employees
Efficient, cheap service.	Lack of containment of refuse can result in significant spillage in back lanes and on highway resulting in litter accumulation.
High recycling rates.	No control over the amount of waste put out for collection, which impacts on treatment and disposal costs.
Some residents prefer black sack collection arrangements for residual refuse.	Some residents unhappy with the lack of a wheeled bin service.
	It is extremely difficult to hire refuse collection vehicles that are suitable for black sack collection as majority are fitted out with wheeled bin lifts.
	It is easier for residents to store refuse if a wheeled bin is provided.

## Financial Implications

37. There will be no immediate financial implications with this option as we will continue to operate the service with no changes, however, in the longer term, there may be increased insurance costs if more claims are received and are successful from injuries caused as a result of the collection arrangements. In addition, if the HSE do not see any improvements by implementing Option B or Option C, then it is likely they will issue an improvement notice that we would either have to comply with or pursue legal action, which may or may not be successful. This could result in a criminal prosecution, which the Authority would have to defend. It is important to note that organisations cannot insure against criminal fines therefore the Authority would have to meet any fines imposed if unsuccessful. In addition, there are other potential costs associated with lost time for any accidents that result in claims being paid out.

## Assessment against HSE Requirements

38. As this option proposes no change, it does not provide any improvement in relation to manual handling.

## Option B - Increase the operatives on each refuse collection round or increase number of rounds

39. Currently, there are 32 weekly refuse collection rounds across the Borough collecting from 48,448 properties. Each round is one day's work for a collection crew consisting of driver plus two operatives. There are six dedicated refuse collection vehicles for household waste dealing with 30 of the 32 rounds. The remaining two rounds are serviced from spare capacity on one of the trade waste collection vehicles. On average, each crew member lift 7 tonnes of waste per day.
40. To reduce the manual handling impact, there are a number of choices. Each crew could be increased by one member of staff to a driver and three operatives. This would have the effect of reducing the average weight lifted to approximately 4.7 tonnes, which is a reduction of a third per operative. The additional crew member would need to be a supervisory member of staff as it would be essential to monitor continuously the collection behaviour of operatives. Without that supervision and monitoring, it is likely that old working practices would continue and with the addition resource, the refuse rounds would simply finish earlier. The needle stick injury risk remains the same.
41. An alternative to an additional crew member would be to introduce an additional frontline round, therefore increasing from six to seven. Again without continuous supervision and monitoring it is unlikely that working practices will change.

Advantages	Disadvantages
No change to refuse collection change for residents.	Additional cost associated with either additional crew member or additional round.
Reduces the amount of manual handling carried out by each employee by up to a third.	Does not resolve cuts and needle stick injury potential.



<b>Advantages</b>	<b>Disadvantages</b>
Maintains existing collection system of black sacks, which some residents prefer.	Lack of containment of refuse can result in significant spillage in back lanes and on highway resulting in litter accumulation.
Would still be an efficient service.	No control over the amount of waste put out for collection, which impacts on treatment and disposal costs.
	Some residents unhappy with the lack of a wheeled bin service.
	It is extremely difficult to hire refuse collection vehicles that are suitable for black sack collection as majority are fitted with wheeled bin lifts.
	Would require continuous supervision and monitoring of crew to ensure they are operating to safe working practices.
	Addition of site training and instruction for operatives on an ongoing basis.
	It is easier for residents to store refuse if a wheeled bin is provided.

### **Financial Implications**

42. To increase each round by an additional FTE operative will cost approximately £21,000. Therefore total annual cost of £134,400.
43. Alternatively, to add an additional round of driver plus two crew members would cost approximately: refuse vehicle including lease costs, fuel and maintenance £50,000, driver £25,000, two operatives £42,000. Therefore total annual cost of £117,000.

### **Assessment against HSE Requirements**

44. This option meets some of the requirements of the Health & Safety Executive by reducing the amount of manual handling up to a third for each employee. In addition, the additional crew member would be supervisory level, whose role would be to ensure that safe manual handling techniques were employed by all staff at all times.
45. When deciding the best risk control option, there are various demands to balance. The risk reduction measures in this option are reliant on human behaviour and not physical controls such as wheeled bins. When you are relying on people to actively make use of a risk control, there is always the potential for the control not to be used. Such activities rely on humans to do them and can therefore fail, limiting the effectiveness of the control measure.

### **Option C - Introduce wheeled bins across the Borough to replace the black sack collection**

46. The existing refuse collection system using black sacks at kerbside is extremely efficient and quick. Introducing wheeled bins will slow the service down as there is an actual time of between 9 and 16 seconds for a wheeled bin to be lifted and emptied and returned back to the ground. This would mean the number of properties serviced by each collection round will reduce and we would therefore need to increase from 32 rounds to 40 rounds. This

would require eight frontline refuse collection vehicles. Each round would have a crew of driver plus two operatives.

47. There would be a requirement to issue each property with a wheeled bin and consideration would need to be given to what size bin is issued. There is a risk that residents will fill the wheeled bin with rubbish regardless of the size, therefore the larger the bin, the more rubbish being handled and the greater the cost to treat and dispose of. A wheeled bin with a capacity of 240 litres is capable of taking between three and four bin bags, which would be the preferred size, however where households have five or more and need a larger capacity, a 360 litre wheeled bin would be offered. By opting primarily for 240 litre bins, this will restrain the amount of rubbish that can be put in them and so should help to promote recycling for many households. If wheeled bins were to be introduced, a number of new robust policies would also need to be implemented at the same time, including:
- (a) No side waste (which means additional bin bags could not be placed at the side of the bin for collection, except at Christmas time).
  - (b) Wheeled bins not to be overflowing.
  - (c) Bins to be brought to the curtilage and returned within the curtilage of the property or in the case of farms to the end of the farm track on the same day as collection.
  - (d) For terraced properties with back lanes, wheeled bin is to be placed in the back lane for collection.
  - (e) No green waste to be placed in the wheeled bin.
  - (f) The existing assisted refuse collection policy would remain and operatives would collect and return the wheeled bin for those residents who are incapable due to ill health or disability.
  - (g) Although historically there has been concern as to how practical the introduction of wheeled bins would be for terraced properties, these issues can be resolved as they have been in numerous towns and cities across the country. However, there will be a very limited number of properties that because of their location/ physical access would not be able to utilise a wheeled bin. In these cases, the existing black sack arrangements would continue.
  - (h) In some locations, particularly restricted back lanes, which are unsuitable for refuse vehicles, collection points would be identified where residents are expected to bring their wheeled bins to, and collect them from.

<b>Advantages</b>	<b>Disadvantages</b>
Containment of refuse therefore minimising possibility of cuts/needle stick injuries.	Additional set up costs for wheeled bins and continuing revenue implications.
Significant reduction in manual handling as a result of not physically lifting and throwing black sacks.	Changes to refuse collection system would impact on all residents across the Borough.

<b>Advantages</b>	<b>Disadvantages</b>
Containment of refuse therefore less spillages in back lanes and highways.	Officers and Members would need to be robust in their defence of the system during the early days of implementation.
Cleaner system, which will have a positive impact on the overall cleanliness of the Borough.	There will be a number of teething issues associated with the introduction of wheeled bins that will have an impact on the Council as a whole.
Some residents would prefer a wheeled bin system.	
Can control the amount of waste put out for collection therefore controlling treatment/disposal costs.	
Should encourage residents to separate paper, card and glass as limited capacity of wheeled bin.	
It would be easier for residents to store refuse in a wheeled bin.	
Provides opportunity for greater collaboration with the Tees Valley authorities as they all operate a wheeled bin service.	

### **Financial Implications**

48. The key obstacle to introducing wheeled bins will be the financial implications, which will be significant, as follows:

<b>Additional Cost</b>	<b>Annual Revenue Implications £</b>
Purchase of wheeled bins, 50,000 @ £20 per bin = £1,000,000	
Annual cost of borrowing	120,600
Purchase of two additional refuse collection vehicles (at £150,000 each), lease and annual running costs, £50,000 per vehicle	100,000
Purchase of eight wheeled bin lifts for frontline vehicles plus spare, 9 @ £15,000 each = £135,000	
Annual cost of borrowing	30,000
Additional crew for two extra vehicles, 2 x drivers @ £25,000, 4 x operatives @ £21,000	134,000
Ongoing replacement wheeled bins for those that are lost, damaged or burnt, 1,500 @ £20	30,000
<b>Note: replacement bins could be charged.</b>	
As a result of introducing wheeled bins, a reduction in street litter, a reduction in staffing and vehicles (four staff, two caged vehicles).	(100,000)
<b>Total</b>	<b>314,600</b>

49. The overall annual cost to introduce wheeled bins will be £314,600 per annum. In addition, for a six-month period during the implementation of a wheeled bin service, an additional four staff would be required. These staff would work on the implementation plan, working closely with a selected supplier and, through delivery and initial bedding in period, deal with requests, enquiries and complaints from the public. Once wheeled bins are fully implemented and bedded in, these staff would no longer be required. It is estimated that the one off cost for this service would be approximately £60,000.
50. If Members agree to implement a wheeled bin collection system, at the time of writing this report, it would take a minimum of six months to plan and receive delivery of wheeled bins, additional refuse collection vehicles and bin lifts, therefore the intended roll-out of a wheeled bin refuse collection service would be through November into early December 2012.

### **Assessment against HSE Requirements**

51. The introduction of a wheeled bin collection service would meet the full requirements of the Health and Safety Executive. The difficulty the Authority will face is how, in these extremely difficult financial times when there is a requirement to reduce a further £8 million from the revenue budget, it can support the introduction of wheeled bins at a cost of over £300,000 annually.

### **Additional Considerations**

53. In addition to these three options, there are also two others which have not been assessed in any detail. Firstly, alternate weekly collections, which Members may want to consider should wheeled bins be introduced; this will minimise the financial impact. In an alternate weekly collection system, Week 1 residual refuse would be collected and Week 2 recycling.
54. Alternate weekly collection systems work best where the proportion of waste is roughly split 50/50 therefore consideration would need to be given to which materials are separated at kerbside and the overall impact on the waste treatment disposal contract. Currently the split of residual waste to recycling at kerbside is 80/20. Therefore, if the materials collected for recycling at kerbside were increased to include such things as all types of plastic, metals and tetrapaks then there would be a need to give extra storage capacity to residents, which would mean another wheeled bin also. The Waste Disposal Contract is tailored to our existing collection arrangements and any changes to that would have significant impact on that contract, which would need to be renegotiated. It is for these reasons that no further work has been done on modelling an alternative weekly collection system and it is officers opinion that although not impossible, it is more appropriate for the Council to stay with a weekly residual collection and a fortnightly recycling collection.
55. Earlier this year the Government announced a £250 million fund for refuse collection if local authorities committed to a weekly residual waste collection service. The criteria and detailed application process have recently been released and the aim of the scheme is to support local authorities to:
- (a) Introduce/retain or reinstate a weekly collection of residual household waste, in addition these collections must be supplemented by a separate recyclable collection at

least one per fortnight, or

- (b) Propose improvements to an existing waste service which is already centred around a weekly residual collection, for example by improving environmental performance, increasing affordability or sustainability of that service, or
  - (c) Add a weekly food waste (or organic waste) service to an existing fortnightly collection of residual household waste where an authority can credibly demonstrate that this represents the preference of local people. This additional service will reduce the amount of biodegradable waste sent to landfill and reduce the amount of biodegradable food waste that has to be stored in or around the home.
56. Clearly there is the opportunity for the Council to apply to this fund to assist in the implementation of wheeled bins and achieve other benefits (such as improving environmental performance). Members may need to consider how affordable retaining the weekly collection system would be in the future as there is further pressure on local authority finance, and may consider that applying for the Government funding would help the Council sustain a weekly collection scheme.
57. The second alternative would be to place large commercial bins at various locations within the street where residents put their waste in these bins for collection. This type of system is sometimes operated abroad in European countries and has been introduced in a limited number of local authorities within the United Kingdom. The main reason for introducing this type of collection system is where there is no or limited space for the resident to store a wheeled bin and particularly where there is a heavy concentration of flats. As these issues are not a concern for Darlington, no further modelling of a communal bin collection system has taken place.
58. Concerns have previously been expressed with regard to secondary fires as a result of refuse being placed out for collection in wheeled bins. County Durham and Darlington Fire and Rescue Service collect secondary fire data with regard to this area including large refuse containers, e.g. skips, loose refuse, general refuse/rubbish tipped and wheeled bins. A number of fires associated with these categories across County Durham and Darlington range from 0.001 per household to 0.008; the highest being the old Easington District followed by the old Wear Valley District, with Darlington being the third highest area at 0.005 for secondary fires associated with refuse per household.
59. The option described in paragraph 57, of larger 1100 wheeled bins placed at strategic locations within each street for residents to place their rubbish in, does end up with rubbish being piled around the bin and creates a secondary fire hazard.

## **Summary of Financial Implications**

### **60. Option 1**

No additional costs but significant risk of challenge from HSE therefore potential legal cost and any criminal fine if unsuccessful.

**61. Option 2**

Annual costs of £134,400 or £117,000

**62. Option 3**

Annual costs of £314,600

One off cost of £60,000

**Conclusion**

63. Darlington Borough Council is one of the last few local authorities utilising a black sack collection system for residual household waste. The majority of other authorities have moved to a wheeled bin service. As part of the ongoing review of all Council services, refuse collection arrangements have also been considered. Taking on board the positive aspects of introducing a wheeled bin service alongside the health and safety benefits, Members need to consider changing collection arrangements by introducing a wheeled bin service within Darlington.
64. The Health & Safety Executive have raised a number of concerns with regard to the existing refuse collection arrangements. A number of those have now been resolved, however their remains the outstanding concerns with regard to manual handling and potential needle stick/puncture injuries as a result of the black sack collection system.
64. There are two change options; either increase the number of staff per round or introduce wheeled bins. By introducing an additional crew member or additional vehicle and crew will have a positive impact by reducing the amount of waste lifted by each operative by up to a third. What this change in system does not resolve is the potential for needle stick/puncture injuries. In addition, there would need to be robust monitoring to ensure that manual handling good practice is maintained.
65. The majority of collection authorities across the UK have changed to a wheeled bin service, which does reduce manual handling risks and virtually eliminates potential for needle stick/puncture injuries. However, there are significant financial implications with regard to introducing wheeled bins. An annual cost of approximately £314,000 and a one off cost of approximately £60,000. This additional annual cost needs to be balanced against the risks of not implementing a wheeled bin system.
66. Financially, the difference in these two options is approximately £180,000 per annum more expensive to introduce wheeled bins. In these difficult financial times, this additional cost needs to be taken into account and balanced against what would be deemed to be reasonably practicable.
67. Taking into account health and safety concerns, all the positive benefits and the opportunities of joint working in the future with Tees Valley authorities, it is believed that Darlington Borough Council now needs to implement a wheeled bin service across the Borough. If Members agree to introducing this service then following successful procurement of wheeled bins, additional vehicles and lifting equipment, the new service

could be introduced towards the end of 2012.

### **Procurement Considerations**

68. Under the Contract Procedure Rules one of the responsibilities for Cabinet is to agree the Procurement Plan that will identify the route that contracts will take i.e. Cabinet decisions for all strategic procurement activity and officer decisions for routine procurement.
69. The implementation of a wheeled bin service requires the procurement of the wheeled bin containers, replacement vehicles and tail lifts to modify existing vehicles, the total cost is estimated to be £1,435,000 as detailed in paragraph 48. It is the intention to utilise existing NEPO frameworks to conduct a mini competition for all of these purchases. The contract award decision will be made on the basis of quality and cost.
70. The procurement of wheeled bins has been assessed against the previously agreed criteria and deemed strategic (see **Appendix 4**), therefore a further report will be brought back to Cabinet on the procurement of wheeled bins.

### **Outcome of Consultation**

71. An equalities impact assessment workshop was held with limited attendance, although invitations were widely circulated. The two key impacts from that workshop and a subsequent letter from Darlington Association on Disability are:
  - (a) Wheeled bins being left on the pavement
  - (b) Ability of some residents to use wheeled bins
72. The proposals within this report are that residents place wheeled bins within the curtilage of their property for collection, which will then be returned to within the curtilage of their property (preferably to the same place) therefore minimising the time any wheeled bin is left on a pavement. For properties that will be serviced from the back lanes, the policy will be for the resident to put the wheeled bin in the back lane on the morning of collection and return at the earliest opportunity, certainly no later than early evening on the day of collection. Where residents are not following these requirements, officers would visit those individuals and request that they adhere to the requirements of the wheeled bin service. Thereafter, for those residents who choose to ignore this request, it may be necessary for enforcement action to be taken.
73. The Council currently operates an assisted refuse collection service for those residents who are not capable of placing refuse out for collection, which covers approximately 1.5% of all weekly refuse collections. Wheeled bins will bring additional issues for some residents, which may have an impact and therefore it may well be necessary to offer an assisted collection to those individuals. Experience from other local authorities is by introducing a wheeled bin service, assisted collections rise from approximately 1.5% up to a maximum of 2.5% of total collections. In addition, there will be some residents who simply cannot use a wheeled bin for a variety of reasons; unable to wheel the bin or simply unable pick rubbish up to put into the bin, in these cases alternative arrangements would be put in place.
74. An assessment of those individuals who require assisted collections will be carried out as a priority and as part of the early publicity material, we will ask residents to make contact

with us so these can be arranged.

75. No wider public consultation has taken place has taken place in the production of this report. Subject to Member approval, a detailed communications strategy will be implemented to ensure the public are fully aware of the impact of the changes and what it means to them as individual households.
76. In addition, consultation and engagement will take place with the workforce, which will assist with a smooth implementation.





RF (T) Tues 10/5/11, 4.00 pm

Health and Safety  
Executive

Field Operations Directorate

Jonathan Colin Wills

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HM Principal Inspector  
Bruno Porter

Mr Ian Thompson  
Assistant Director – Community Services  
Darlington Borough Council  
Vicarge Road  
Darlington  
DL1 1JW

3 May 2011

Reference 4241317



Dear Mr Thompson

#### HEALTH & SAFETY AT WORK ETC. ACT 1974

Re: Waste management and recycling intervention

I write following my attendance at the meeting held at Vicarage Road, Darlington on 19 January, and my subsequent visits to observe municipal waste collection with Gary Bennet on 10 March. As a result of these visits, I have identified the following matters which require further attention.

##### 1. Manual handling of refuse in bags

Darlington Borough Council currently collects general municipal waste in bags.

Your letter dated 11 April 2011, stated that since March 2009, there have been 7 instances of workers who were working in municipal waste collection, being unable to carry out their normal duties for more than 3 days due to sustaining musculoskeletal injuries.

I observed during my inspections that operatives were carrying 2-3 bags in each hand whilst making their way to the rear of the refuse collection vehicles (RCV). The bags were then thrown in to the RCV.

The Council must assess the musculoskeletal risks associated with this activity and consider reasonably practicable remedial measures.

It is likely that a suitable and sufficient risk assessment will identify that refuse collections should be carried out using wheelie bins of appropriate sizes rather than bags or small dustbins, due to the risk of musculoskeletal disorders, increase in metabolic demands on the body, and injury from the presence of sharp objects such as broken glass or discarded syringes.

Should the assessment identify that the use of wheelie bins for general waste is not reasonably practicable, and the collection of bags is likely to continue, other alternatives to reduce the risk of operatives being exposed to the risk of musculoskeletal disorders, should be considered (e.g. bulk kerbside collection facilities).

If it is determined that bags will continue to be used to collect municipal waste, operatives should be trained in the principals of safe handling and correct lifting techniques. Operatives should be discouraged from carrying too many bags at once, and bags should also be lifted and placed into the RCV rather than being thrown in. This will undoubtedly lead to a large increase in the duration of the collection activity.

Operatives should also be monitored to ensure that manual handling techniques are adhered to and other controls measures are in place.

It is vital that operatives are involved in any scheme where improvements could be made to their working practices.

## **2. Presence of sharp objects in bags**

Concerns were raised by operatives during my visits, relating to the provision of PPE to protect against sharp objects within bin bags, and described several instances where the PPE being supplied did not provide adequate protection, resulting in serious cut injuries.

The Council should assess the suitability of the PPE currently being provided to its municipal waste collection operatives. Operatives must be consulted in this assessment process.

Kevlar trousers and jackets offer protection against this type of hazard. However such items can become uncomfortable as workers become overheated due to the exertion of the bag collection activity, and seasonal temperature rises. Such factors will lead to workers removing the protective clothing, rendering their provision useless.

The risks associated with sharps objects would be dramatically reduced by using wheelie bins in municipal waste collection as opposed to bags.

## **3. Risk assessment of collection route**

The route risk assessment which was shown to me at the meeting on 19 January is not sufficient. Such an assessment should identify the risks on all of the routes used by the municipal waste collection team. For existing routes, this should identify whether the control measures in place are adequate and are being maintained, and for new routes whether the proposed control measures are going to be adequate.

A collection route may have a number of hazards. Permanent hazards (e.g. Schools, Road Speed and Concealed entrances) should be recognised and controlled as part of the crew's formal instructions. Operatives should be aware of expected control measures when they encounter hazards due to changing conditions (e.g. Roadworks, wintery conditions and parked cars).

The significant findings of the route risk assessments (control measures) must be communicated to the collection crews in a suitable and comprehensible way. One way of communicating this information could be via a GPS route planning system. This would be suitable for both regular and relief/agency drivers. Care must be taken not to overload operatives with significant amounts of information that will be difficult to recall.

The crew should be made aware of the expected control measures which should be adopted for the specific route. These should be identified on the route plan. Control measures may include:

1. Single sided working
2. Avoiding times of high pedestrian activity
3. Repositioning of collection points

4. Use of Reversing Assistants where reversing can not be eliminated
5. Highlighting school holidays

Further guidance on this subject can be found within 'Safe waste and recycling collection services (Waste 23)', available to download from the HSE website.

#### **4. Reversing Assistants**

Reversing causes a disproportionately large number of moving vehicle accidents in the waste/recycling industry. Injuries to collection workers or members of the public by moving collection vehicles are invariably severe or fatal.

Darlington Borough Council currently use reversing assistants as one of the ways in which this risk is controlled. HSE's guidance 'Waste and recycling vehicles in street collection (WASTE04)' identifies the roles of the reversing assistant as to:

- a) Signal the collection vehicle driver to stop when necessary to prevent the vehicle colliding with pedestrians and other road users;
- b) Warn approaching vehicles or pedestrians; and
- c) Assist trained and competent drivers to safely manoeuvre the vehicle.

I noted on several occasions that although the operatives were assisting the driver in the manoeuvre, there was little attention given to the likelihood of vehicles and pedestrians entering the danger zone.

I also observed at least one instance where the RCV 'worked in' to a cul-de-sac (i.e. vehicle reverses, is loaded, reverses, stops, is loaded etc until reaching the end of the cul-de-sac, before finally driving forwards to exit the street). This type of procedure has caused deaths and should not be used. Such areas should be identified as part of the route risk assessment.

The Council should review its Reversing Assistants training, and monitor how the activity is being carried out in practice.

#### **5. Noise levels during glass collection**

During my site visits I measured the noise levels to which operatives undertaking glass collections were being exposed to. These figures were substantially different to those undertaken by the Council in 2007. This could be due to several factors, including differing vehicles.

I have discussed this matter with Sarah Haynes (HM Specialist Inspector (Noise and Vibration)) who suggested that the Council consider the control measures identified within 'Reducing kerbside glass collection noise risks in the waste and recycling industry (WASTE16)' which is available to download from the HSE website.

The noise levels will then have to be assessed to determine whether additional control measures and health surveillance is required.

#### **6. Reporting of injuries diseases and dangerous occurrences regulations 1995**

I reiterate following my letter dated the 25 March, and your response dated 11 April, that the Council has a legal duty to report injuries which result in the injured person being away from work or unable to do the full range of their normal duties for more than three days.

The Council must ensure that all departments under its control are aware of this, and put measures in place to prevent recurrence.

**7. Information for employees**

I have enclosed a second copy of this letter which should be brought to the attention of your employees.

Please contact me in writing before the **3 June 2011**, with how you intend to address the matters raised in this letter.

A further visit will be carried out in approximately 12 months to assess the changes implemented by the Council.

Yours sincerely



**Jonathan Colin Wills**  
**HM Inspector of Health and Safety**

Cc Chris Robinson & Mark Jenkins (Union Representatives)

**APPENDIX 2**  
**Vicarage Road, Darlington DL1 1JW**  
**Tel: (01325) 380880 Fax: (01325) 486987**  
**DX 69280 Darlington 6**  
**website: www.darlington.gov.uk**

cc Joanne Skelton, Acting Health & Safety  
Manager  
Debbie Carling, Lead Auditor  
Brian Graham, Head of Environmental  
Services  
Street Scene Union Reps

Mr Jonathan Colin Wills  
Inspector of Health & Safety  
Health & Safety Executive  
Arden House  
Regent Centre  
Gosforth  
Newcastle Upon Tyne NE3 3JN

Date : 31 May 2011  
Please ask for : Ian Thompson  
Direct Line : 01325 347447  
Your Reference : 4241317  
Our Reference : IRT/CLD  
Document Name :  
Email Address : ian.thompson@darlington.gov.uk

Dear Mr Wills

### **Waste Management and Recycling Intervention**

Thank you for your letter of 3 May 2011 and our subsequent meeting on Friday 20 May 2011 at Vicarage Road.

In response to the issues you have raised, please note the following:

#### **1. Manual handling of refuse in bags**

I intend to carry out a full and detailed review of our refuse collection arrangements, which will include a comprehensive risk assessment taking on board current evidence and best practice. Any changes to the refuse collection system will also need to be balanced against available financial resources in these extremely difficult financial times. I anticipate this review and decision-making process to be carried out throughout this year with a view to agreement on any changes, should they be required, taking place at Cabinet in November/December 2011. Thereafter if there is a requirement for any changes, these would then be implemented in early/mid 2012.

#### **2. Presence of sharp objects in bin bags**

A full review was carried out of PPE by Mike Dawson, one of the Council's Health & Safety Officers, for refuse and recycling in March this year. It was identified that the trousers provided did not meet the European standard, however the ballistic nylon material that is sown into the outer leg meets BS EN ISO 13997:1999, which is the standard used by the MOD and exceeds the standard for puncture resistance in gloves.

As part of the overall review of refuse collection arrangements, PPE will also be considered in that process.

Continued/.....

### **3. Risk assessment of collection route**

In the short term, we will continue to work with the drivers on the existing risk assessments that have been carried out for routes and ultimately will work towards installing a suitable GPS/route planning system. Discussions are currently underway across the North-East with regard to this equipment. Again, the outcome of the overall review of refuse collection will inform this process. At that time if rounds change, this would present the ideal opportunity to implement GPS software and full round risk assessments.

### **4. Reversing Assistants**

I accept your concerns with regard to what you observed and the individuals concerned have been reminded of their responsibilities. In addition, we will carry out further training and monitoring to ensure that safe working practices are adopted consistently across all employees.

### **5. Noise levels during glass collections**

We will carry out monitoring of noise levels on the recycling vehicles and look at adapting pods as required.

### **6. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995**

Joanne Skelton, the Council's Acting Health & Safety Manager has reviewed our procedure and implemented changes. A system has also been put in place where Occupational Health report to Joanne on all specific individual cases.

### **7. Information for employees**

I can assure you that the Council do involve employees in relevant health and safety matters. Staff have been involved in route risk assessment, the choice of PPE and other projects. Brian Graham, Head of Environmental Services holds an eight-weekly meeting with union representatives within Street Scene to discuss all relevant union and health and safety matters. In addition to this, I personally meet with representatives from all unions on a quarterly basis at the Departmental Safety Consultative Committee.

Once again, thank you for your letter and constructive comments; I will keep you up to date with progress. I look forward to meeting with you again in 12 months time, if not before.

Yours sincerely

**Ian Thompson**  
**Assistant Director Community Services**

## OTHER WASTE COLLECTION AUTHORITIES WHICH STILL USE BLACK BAGS

Local Authority	Contractor	Collection Frequency
Oadby & Wigston Borough Council	In House	Weekly
Brentwood Borough Council	In House	Weekly
Camden LB	Veolia	Weekly
City of London	MRS Environmental	Weekly
Hammersmith & Fulham LB	Serco	Weekly
Havering LB	Biffa	Weekly
Hillingdon LB	In House	Weekly
Hounslow LB	SITA	Weekly
Islington LB	Enterprise	Weekly
Kensington & Chelsea LB	SITA	Twice weekly
Merton LB	In House	Weekly
Redbridge LB	Enterprise MRS	Weekly
Richmond upon Thames LB	Veolia	Weekly
Tower Hamlets LB	Veolia	Weekly
Wandsworth LB	Biffa	Weekly
Westminster LB	Veolia	Twice weekly
Arun District Council	Verdant	Weekly
Ashford Borough Council	SITA	Weekly
Isle of Wight Council	Island Waste Services (Biffa)	Weekly
Lewes District Council		Weekly
Portsmouth City Council	Veolia	Weekly
Tandridge District Council	Biffa	Weekly
Workingham Council	SITA	Weekly
Bath & North Somerset Council	In House	Weekly
Forest of Dean Council	Biffa	Weekly
West Dorset District Council	In House	Weekly
Carmarthenshire County Council	In House	Fortnightly
Monmouthshire County Council	In House	Fortnightly
Sandwell MBC	Serco	Weekly

## APPENDIX 4

	Current Supplier or Contractor	Type of Supply	Approx Value per annum	Approx Value for 4 years contract	Cost	Impact on Residents (1)	Risk - Financial, Health & Safety, Public (2)	Innovative in design, New form of contract, Sustainability (3)	External Monitoring e.g. from funding body (4)	Total	Strategic?	Appropriate Director for Delegation
1	New Procurement	Wheeled Bins	£1,000,000	£1,000,000	2	5	3	4	2	16	Strategic	Cabinet
2	New Procurement	2 Refuse Vehicles	£300,000	£300,000	1	1	1	1	1	5	Non-Strategic	Director of Place
3	New Procurement	Tails lifts to adapt existing refuse vehicles	£135,000	£135,000	1	1	1	1	1	5	Non-Strategic	Director of Place