CAB755 FOR DECISION WARD(S): ALL

HEALTH PERFORMANCE IMPROVEMENT COMMITTEE - 21 January 2004

CABINET - 28 January 2004

MEETING STATUTORY RECYCLING TARGETS - A WAY FORWARD

REPORT OF THE PORTFOLIO HOLDER FOR HEALTH AND WELLBEING

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**RECENT REFERENCES:** 

HH52 - Recycling and Household Waste Management Review - 21 November 2001

HH77 - Increasing the Effectiveness of Kerbside Recycling - 13 March 2002

CAB670 - Project Integra Annual Business Plan 2003/04 - 30 June 2003

CAB759 - National Waste Minimisation and Recycling Fund Bid - 3 December 2003

HE21 - Report of the Waste Management Policy Review Informal Group - 21 January 2004

# EXECUTIVE SUMMARY:

This report considers the challenges for the Council's waste management service presented by the achievement of statutory recycling targets, waste growth and other factors that will influence the way in which the service is provided in the future.

# **RECOMMENDATIONS:**

- 1. That Committee considers the options for improving recycling / composting performance aimed at the Council achieving its 2005/06 statutory target and indicates its preferred option for a pilot scheme, supported by an educational and promotional programme.
- 2. That Committee considers the Council's current waste collection policies, including those concerning the provision and emptying of refuse and recycling containers, and agrees the changes considered necessary by the Waste Management Policy Review Informal Group to support the twin aims of waste reduction and increased recycling / composting.
- 3. That Cabinet confirms the commitment to achieving statutory recycling targets and approves a pilot kerbside collection scheme, and supporting policies, as agreed by the Health Performance Improvement Committee, for implementation subject to necessary funding being available through the National Waste Minimisation and Recycling Fund.

- 4. That Cabinet confirms that the waste management policies as agreed by the Health Performance Improvement Committee be applied in the area of the pilot scheme from its commencement and that policies 1(i), 3(i), 3(iii), 3(iv), 6 and 8 be applied throughout the rest of the district subject to funding and following agreement over necessary variations to the contract with Serco.
- 5. That in the event of insufficient funding being obtained to finance the approved pilot scheme and waste management policies then a further report be brought to Cabinet for consideration.

# HEALTH PERFORMANCE IMPROVEMENT COMMITTEE - 21 January 2004

## CABINET - 28 January 2004

## MEETING STATUTORY RECYCLING TARGETS - A WAY FORWARD

#### Report of the Portfolio Holder for Health and Wellbeing

## DETAIL:

- 1 Introduction
- 1.1 Report HH52 to the Health and Housing Policy Review Committee considered the effectiveness of the Council's waste management service and explored various options to reduce waste and increase recycling and composting. At that time it was resolved to encourage residents to make better use of existing recycling arrangements, including reintroduction of the collection of 'mixed paper' (i.e. all types of clean paper, card and cardboard in addition to newspapers, periodicals and magazines) as part of the kerbside collection scheme.
- 1.2 Following Report HH77 to the Health and Housing Policy Review Committee, resumption of the collection of mixed paper was approved from late 2002 together with the methods of publicising this change to the recycling scheme.
- 1.3 Winchester's published and audited household waste recycling rate for 2002/03 was 16.10% (national Best Value Performance Indicator 82a). The rate for the period April to October 2003, following reintroduction of the collection of mixed paper, was 18.24%.

#### 2. <u>The Current Position</u>

- 2.1 Winchester's statutory recycling / composting targets are 30% for 2003/04 and 36% for 2005/06.
- 2.2 Targets for individual authorities vary, but the Government's aim is to achieve national average household waste recycling rates of 25% by 2005/06, 30% by 2010 and 33% by 2015. For each local authority the targets take account of the recycling rate achieved during 1998/1999. Winchester has therefore been set some of the highest recycling targets in the country due to its previous achievements.
- 2.3 The twin bin collection scheme was introduced with the aim of achieving a local recycling / composting rate of 25%. This local performance indicator takes into account recycling and composting via the Civic Amenity Site network, and home composting. Whilst this target has been exceeded, and some further steps could be taken to marginally improve on this performance, it is clear that the Council's current waste management arrangements and policies are not capable of meeting the more onerous statutory targets.
- 2.4 The Government has indicated that it proposes to intervene where local authorities fail to deliver best value and has also made it clear that it will work with authorities to ensure that such failures are minimised and that intervention will be the exception. Possible triggers for intervention are stated in the guidance and include both failure of process and failure of substance. Failures of substance include failure to meet nationally prescribed performance standards (i.e. recycling targets) and the guidance states that such failures are more likely to attract intervention.
- 2.5 The Council could opt to retain its current waste management arrangements and make no significant changes. However, the various drivers for change are set out

below. Also, the wish to meet statutory recycling targets was one of the key views to come out of the waste workshops held earlier in 2003, and this is further supported by the recent work of the Health Performance Improvement Committee Waste Management Policy Review Informal Group.

- 2.6 For comparative purposes, Appendix 1 of this report provides details of the 1998/99, approximate current and statutory target performances for the 13 collection authorities within Project Integra.
- 3. Drivers for Change
- 3.1 Apart from having to meet statutory targets, there are a number of other drivers that will influence the way in which household waste can be managed in the future. These are summarised below.
- 3.2 **Legislation** will increasingly control how waste can be disposed of and restrict the amounts and types of waste involved. In particular:
  - (i) The Landfill Directive requires a considerable and progressive reduction in the amount of waste that can be disposed of by landfill. It is estimated that landfill sites are responsible for more than 25% of the UK's emissions of the 'green house' gas methane.
  - (ii) The Bio Waste Directive will restrict the types of waste that can be disposed of to landfill. Waste derived from animal origin, including food waste, that has the potential to spread diseases such as foot and mouth and swine visicular disease, is likely to be prohibited from being landfilled.
- 3.3 **Public Expectation** that waste will increasingly be treated as a resource and reused wherever possible. Local developments such as the Hampshire Natural Resource Initiative will fuel such demands.
- 3.4 **Financial**: Landfill Tax is set to increase annually from its current level of £14 to £35 per tonne and the cost of waste disposal will continue to rise. There are also financial penalties that will be incurred by the UK if the various targets set by the EU are not met including fines of £500,000 per day (over £180 million a year). Such costs will inevitably fall on householders and businesses through direct or indirect taxation.
- 3.5 **Waste Volumes** which, despite the publicity given to waste reduction, continue to keep pace with growth in the economy and the increasing number of households. At the present rate of increase of around 3% per annum, it is forecast that the amount of waste will double by 2020 and, if unchecked, will require a doubling of infrastructure and costs in relation to collection, treatment and disposal. The amount of waste collected from Winchester's residents in 2002/03 was 402 kg per head, well above the average of 357 kg for the top performing 25% of authorities. Somehow, the link between increasing affluence and increasing waste volumes needs to be severed.
- 3.6 **Garden Waste**, the disposal to landfill of which, is not sustainable in the long term and may eventually be banned. Much garden waste can be home composted but, whilst this should be encouraged as far possible, it has its limitations. Therefore in order to be successful, most councils' recycling strategies will need to have some provision for the collection of garden waste for centralised composting.
- 3.7 **Project Integra Policy**, which is moving towards the prohibition of garden waste from the general waste stream and the introduction of separate, chargeable, kerbside collection services for this waste fraction. Currently, Winchester's residents are permitted to dispose of garden waste, free of charge, in their refuse bins, and this accounts for about 15% of total household waste. If the Council is to meet its

statutory recycling target, it will need to consider how garden waste can best be dealt with as part of its overall waste management and reduction strategy.

- 3.8 However, if garden waste was removed from refuse bins for separate collection, householders could simply use the space (the additional capacity) created to dispose of other waste. This would result in an overall increase in the total amount of waste collected, and largely negate the benefit of a separate collection service.
- 3.9 Therefore, any separate collection scheme for garden waste should include a communication and promotion strategy aimed at waste reduction as well as the encouragement of recycling. Also, some means of limiting the total amount of waste put out by householders for collection.
- 3.10 **Bin Provision**: since reintroduction of the collection of mixed paper, the Council has received many more requests from householders both for larger recycling bins and to be able to swap their 240 litre refuse bins with their 140 litre recycling bins. Also, currently there are no restrictions on the number of refuse bins that householders are permitted to put out for emptying. Such a policy does not encourage waste reduction.
- 3.11 Any changes to Council policy concerning provision and use of bins and waste collection generally could have considerable implications for customers' perception of the service. However, in light of statutory targets, it is considered appropriate to review current policies to ensure that optimum advantage is made of all resources, including householders' commitment to recycling.

#### 4. Key Views

- 4.1 The following is a summary of the views expressed by Members at the workshops held earlier in 2003 to consider how the Council should proceed in developing its waste management policies and collection arrangements.
- 4.2 **Meeting Statutory Targets:** that any changes to waste collection arrangements should be capable of ensuring that Winchester meets its statutory targets. Any short-term measures adopted should not jeopardise the meeting of long-term targets.
- 4.3 **Garden Waste:** that the Council should move towards the diversion of garden waste from landfill. However, prohibiting the disposal of garden waste in refuse bins should not take effect until residents have an alternative and sustainable means of disposal (i.e. the provision of a free or chargeable collection service for this waste fraction).
- 4.4 **Waste Reduction:** that to reduce growth in the waste stream, policies should be introduced that encourage residents to reduce the amount of waste requiring collection and disposal. However, in developing such policies, any imposed restrictions should include some flexibility for larger households.
- 4.5 **Education and Promotion:** that any significant changes be supported by comprehensive educational and promotional measures. A communication strategy, including use of a 'community engagement team' to facilitate change, was essential.
- 4.6 **Pilot Scheme:** that trials of any proposed changes be undertaken, including an assessment of customer satisfaction, before considering district wide implementation.

# 5. <u>A Way Forward</u>

5.1 Waste collection impacts on every household every week. Therefore any proposals for significant change must be considered carefully, properly planned and implemented. Importantly, any major changes will require public consultation, support

and understanding of the reasons for change. It must also be accepted that the most appropriate way forward will not satisfy all residents.

- 5.2 Based on the experience of other authorities there is certain to be some resistance to any scheme involving fortnightly refuse collection. Also, to the banning of garden waste from residual waste bins. However, based on the examples set by the highest performing authorities, such as Daventry, East Hampshire and Eastleigh, such measures will be necessary if statutory targets are to be achieved.
- 5.3 The following proposals are therefore put forward for consideration by Members:
  - (i) **Kerbside Collection Scheme:** that a pilot scheme be undertaken for the separate kerbside collections of residual waste, dry mixed recyclables, garden waste and, possibly, glass, with each fraction collected fortnightly.
  - (ii) **Waste Minimisation and Reduction:** that in support of the above, an educational and promotional programme be implemented in the area of the pilot to encourage residents to reduce, reuse and recycle their waste.
  - (iii) **Policy Review:** that Council policies for waste collection, including the provision and use of refuse and recycling containers, be reviewed with a view to encouraging waste reduction and optimising recycling performance.
- 5.4 A pilot scheme is considered essential prior to any district wide implementation to assess residents' satisfaction and impact on their behaviour, to provide factual data on volumes and weights of collected materials, to demonstrate performance against statutory targets, and the quality and suitability of collected materials for processing. A pilot scheme would determine best operational practices such as the most appropriate vehicle type(s) and crew size(s) on which to accurately base the cost of rolling out a scheme district wide. Without the experience gained from a local trial, the risks associated with implementing an untried system would inevitably be reflected in the contractor's price for providing the service.
- 5.5 Charging residents for the collection of garden waste is an option. Project Integra strategy supports the provision of kerbside collection of garden waste on a chargeable basis as free collection has the potential to increase the amount of material entering the municipal waste stream. However, charging is likely to significantly reduce take up of the service and performance against the statutory target. Therefore, it is proposed that for the purpose of any pilot scheme, the only charges levied are those necessary to prevent excessive amounts of garden waste being set out by householders for collection.
- 5.6 Previously it has been necessary to delay improvements to recycling services due to Project Integra having insufficient processing infrastructure to deal with any additional materials collected. With the opening of a new Materials Recovery Facility (MRF) at Alton and the expansion of composting facilities following last year's successful bid by Project Integra for Defra funding, there will be more than adequate processing capacity to deal with any additional recyclable / compostable material collected. Project Integra partners can therefore proceed with confidence to plan necessary improvements to their waste management services.

#### 6. <u>Proposed Pilot Scheme</u>

6.1 Appendices 2 to 6 of this report provide an outline, including estimated cost and performance data, for a pilot, alternate weekly collection scheme developed in consultation with Serco and Project Integra.

- 6.2 Any pilot should cover a representative area of the district in terms of property type, urban / rural mix and socio-economic composition. For cost and operational reasons a pilot would ideally be based on an existing refuse round of 4,000 to 5,000 households with minimal 'trade' waste and communal collections and convenient to Otterbourne waste transfer station and Chilbolton Down composting plant.
- 6.3 The round which best meets these criteria is Round No. 8 covering Micheldever, Sutton Scotney, Wonston, South Wonston, part of Kingsworthy, Abbott's Barton, part of Harestock, Littleton, Crawley, Sparsholt, Hursley and the Southdown area of Shawford / Otterbourne. This round was used previously as the pilot area for the introduction of kerbside recycling, firstly using carrier bags, and then to introduce wheeled bins for recycling.
- 6.4 A preliminary assessment of the risks associated with the proposed pilot scheme and suggested solutions are included as Appendix 7.
- 6.5 It should also be recognised that, while it would be possible to modify the approach initially taken following a pilot scheme, such a trial would inevitably set public expectations as to what was to follow.

#### OTHER CONSIDERATIONS:

#### 7. <u>CORPORATE STRATEGY (RELEVANCE TO)</u>:

- 7.1 The Green Agenda, including the minimising of waste, is a key priority within the Council's Corporate Strategy for 2004-2007.
- 7.2 Under that priority, identified improvements include the introduction of improved waste collection and recycling services including the kerbside collection of garden waste.

#### 8. <u>RESOURCE IMPLICATIONS</u>:

- 8.1 Given the many unknown / undecided factors at the present time, it is not possible to quantify precisely the cost of a pilot or, even more so, the cost of rolling out a successful scheme district wide. However, if it is decided to proceed, and the type of trial and supporting policies agreed, a more accurate estimate of the likely costs of a pilot scheme can be produced.
- 8.2 Whatever, a lower cost option would be to provide the garden waste collection service on a chargeable basis. However, from the experiences of Eastleigh and East Hampshire, a chargeable service may not achieve the statutory target of 36%. Nevertheless, there should still be a significant increase in the Council's recycling / composting rate if any new system was underpinned by robust policies aimed at optimising recycling performance and encouraging waste reduction.
- 8.3 Not offering or severely restricting the availability of additional or replacement bins, possibly by continuing to encourage the use of carrier bags for excess recyclables and permitting householders with 120 litre refuse bins to use black plastic sacks for excess refuse, would also reduce the cost of a pilot scheme.
- 8.4 Expenditure on community engagement and promotional activities could also be curtailed, but at the risk of reduced participation and customer satisfaction. Indeed, recent studies have concluded that higher levels of recycling are unlikely to be achieved without strong promotional, education and awareness campaigns to support the introduction of new systems including kerbside collection of green waste.

- 8.5 Project Integra has been successful in being allocated £5 million under the latest bidding round for the Government's Waste Minimisation and Recycling Fund (CAB 759 refers) and further funding from the Waste & Resources Action Programme (WRAP) may also be available to support the communications strategy element of Integra's proposals. The outline partnership bid included up to £250k for the City Council to support a pilot for the kerbside collection of garden waste and measures to improve the quality and quantity of dry recyclables collected within the district.
- 8.6 Further work is now being undertaken within Integra to formulate more detailed proposals to demonstrate that projects included in the outline partnership bid represent value for money, are deliverable and conform to other elements of the Defra guidance. The proposals must then be submitted to a Project Board, including representatives from Defra and WRAP, who will scrutinise the details of the bid, subsequently monitor progress against identified 'milestones' and recommend to Defra when funds should be released. This part of the process will commence in late January 2004.
- 8.7 Bids from the Waste Collection Authorities formed the largest element of Integra's outline bid of £6.25 million. If, as seems likely, the package of individual bids needs to be scaled down, the criteria for judging priorities will include appropriate indicators such as likely percentage increase in recycling, additional tonnages collected, cost per additional tonne recycled and cost per household covered by the proposed scheme.
- 8.8 It is anticipated that the majority of funding required to undertake the pilot can be obtained through the monies allocated to Integra under the National Waste Minimisation and Recycling Fund detailed in 8.5 of this report. If funding is not fully forthcoming then a supplementary estimate will be required to finance part or all of the pilot. Should this situation arise then a further report will be brought to Cabinet for consideration.
- 8.9 Regardless of how any pilot scheme was funded, depending on the results of the pilot, appropriate resources would need to be allocated in the Council's future expenditure plans for any subsequent district wide implementation. For comparison purposes, the various options for increasing recycling / composting rates, together with estimated performance and cost implications, as previously discussed in HH52 and at the Member's workshop on 11 March 2003 are updated and summarised in Appendix 8 of this report.
- 8.10 The ongoing cost of continuing the arrangements in the pilot area only beyond the end of 2005/06 after the Defra funding has expired is estimated at between £60,000 £160,000 per annum dependent upon the option chosen. However, these costs are also dependent upon subsequent discussion and agreement with Serco, any changes to the arrangements found necessary arising from the pilot and any decision being made as to whether or not to extend the scheme district wide.

#### BACKGROUND DOCUMENTS:

Waste Strategy 2000 (DETR - May 2000).

Waste Strategy Guidance - Best Value and Waste Management (DETR - July 2000).

Guidance on Municipal Waste Management Strategies (DETR - March 2001).

Waste Management - The Strategic Challenge (Audit Commission - July 2001).

#### APPENDICES:

- 1. Recycling Performances and Statutory Targets for Project Integra Collection Authorities.
- 2. Outline for a Pilot Alternate Weekly Kerbside Collection Scheme.
- 3. Estimated Waste Arisings and Performance Current and Proposed Schemes.
- 4. Provisional Project Plan for a Pilot Scheme.
- 5. Estimated Costs of Pilot Schemes.
- 6. Current and Proposed Waste Management Policies.
- 7. Pilot Scheme Preliminary Risk Assessment.
- 8. Summary of Options for Increasing the Recycling / Composting Rate

# **Recycling Performances and Statutory Targets for Project Integra Authorities (%)**

Authority	<u>1998/99</u> Performance	<u>Approximate</u> Performance	Statutory Targets				
		<u>(April – Sept 2003)</u>	2003/04	<u>2005/06</u>			
Basingstoke	10	15	20	30			
East Hampshire	8	33	16	24			
Eastleigh	26	30	33	40			
Fareham	20	21	33	40			
Gosport	9	13	18	27			
Hart	11	15	22	33			
Havant	17	17	33	36			
New Forest	22	23	33	40			
Portsmouth	12	11	24	36			
Rushmoor	8	14	16	24			
Southampton	8	6	16	24			
Test Valley	16	13	33	36			
Winchester	15	18	30	36			

#### Note:

Waste volume service plan projections provided and updated annually by the Project Integra partners currently indicate that only four authorities expect to be able to meet their statutory target in 2005/06.

#### Outline for a Pilot Alternate Weekly Kerbside Collection Scheme

# 1. The Proposal

To provide a service for the separate kerbside collections of residual waste (refuse), dry mixed recyclables, suitable garden waste (green waste) and, possibly, glass, collecting on an alternate weekly (AWC) basis, with collection on the same day each week.

To trial the service on one round, and, subject to successful evaluation, affordability and practicability, to extend the service throughout the District either simultaneously or incrementally.

For purposes of the trial, single compartment vehicles would be employed on the round. However, depending on the results of the trial and further research on their use, it might be beneficial, both financially and environmentally, to use twin compartment vehicles, or a combination of these and conventional refuse freighters, for a district wide scheme.

#### 2. Aims of the Pilot Scheme and Potential Longer Term Benefits

- Evaluate the overall impact of the scheme on the waste stream and customer satisfaction.
- Promote waste reduction, recycling and composting and assess whether such measures make a significant impact on the behaviour of householders.
- Achieve the statutory recycling / composting target of 36% within the pilot area and then district wide.
- Significantly reduce the amount of biodegradable waste disposed of by householders in their refuse bins and its subsequent disposal to landfill.
- Ensure that the green waste collected is suitable for centralised composting.
- Reduce the overall amount of waste disposed of to landfill or incineration.
- Reduce the number of separate trips made by householders to recycling 'bring' sites.
- Offer greater customer choice by increasing the range of materials collected direct from householders thus increasing the opportunity to participate in recycling and composting.

#### 3. Collection Arrangements and Methodology

- 'Low emission', single compartment, compaction vehicles would be used for the trial, with low loading height for the manual emptying of containers for green waste and glass.
- Green waste would be collected in reusable, woven bags emptied into either a 'cut down' euro-bin (to provide low loading height) secured to the vehicle's hydraulic lifting mechanism or directly into the vehicle's hopper. Glass would be collected in a plastic box, bin or basket of up to 55-litre capacity.

- Collection operatives would monitor the quality of materials set out for collection, particularly green waste and glass. Material unsuitable for collection due to excessive contamination **would not be collected** and householders would be provided with a card or letter of explanation posted through their door.
- For the householder, the main change would be that every other week, refuse collection would be replaced by a collection of green waste and, possibly, glass. The fortnightly collection of dry mixed recyclables would continue, as at present, and, for each waste fraction, there would be no change in the established day of collection.
- It is proposed that householders be permitted to purchase additional bags for green waste at an incrementally rising charge. Also, that Serco be responsible for purchase and delivery of additional bags and the collection from householders of charges. Agreement would need to be reached with Serco on the retention of charges.
- Green waste might not be collected over the Christmas and New Year Period to provide additional capacity for extra refuse or recyclables.

#### 4. Estimated Waste Arisings and Recycling and Composting Rates

Estimated waste arisings and recycling and composting rates associated with the implementation of a successful scheme district wide are shown in Appendix 3. The impacts of the changes have been calculated using the following assumptions:

**Refuse**: that the overall amount of collected residual waste would reduce by 20% per household. This is based on the initial experience of East Hampshire District Council following the introduction of the collection of refuse on an alternate weekly basis combined with a fortnightly, free, green waste collection service. The projected increased tonnage of dry mixed recyclables plus kerbside collected green waste and glass is greater than this. However, experience has shown that householders normally find other waste to occupy at least some of the void space created in the refuse bin by the separate collection of recyclables and compostables.

If, however, residual waste were to reduce by an amount equivalent to the increase in the quantity of collected recyclable / compostable material (less allowances for material diverted from civic amenity and bring sites and increased contamination) then higher recycling / composting rates would be achieved.

**Dry Mixed Recyclables:** the amount collected would increase by 70% due to increased participation and improved set out rate. This is based on the experiences of Eastleigh and East Hampshire who collect refuse on an alternate weekly basis, which encourages householders to separate the maximum amount of material for recycling. The waste analysis undertaken for Project Integra by MEL Research in 1999 showed that despite the introduction of kerbside collection of dry mixed recyclables, a further 6,000 tonnes a year of this material was still available in the residual waste stream.

It is estimated that rejects / contaminants would increase from the present level of around 5% to approximately 10% of the dry mixed recyclables collected.

**Garden Waste:** based on the East Hants experience, up to 90% participation could be achieved with a free collection service, with at least 10% of participants likely to purchase additional bags. 80% participation and a set out rate of 4kg per household per collection (25 collections per year) would produce 3,600 tonnes of green waste.

From the waste analysis it is known that at least 4,000 tonnes a year of garden waste is currently available in the residual waste stream.

AWC with a ban on garden waste being deposited in refuse bins and provision of a separate, free collection service should ensure that significantly less green waste would be disposed of as residual waste in the future. However, it is also anticipated that some of the material currently taken by householders to civic amenity sites would be diverted to the kerbside scheme.

**Glass:** based on the Derbyshire Dales scheme, an 80% participation rate producing 3.1 kg of glass per household every two weeks, would produce some 2,840 tonnes of mixed cullet. Some of this would be diverted away from 'bring' sites. The waste analysis showed that, despite a reasonable density of 'bring' sites for glass, at least 2,000 tonnes a year of glass was still available in the residual waste stream.

#### 5. **Delivery Points for the Pilot Scheme**

These would depend on the trial area and proximity / availability of suitable sites to be agreed with Hampshire Waste Services and PI. Likely delivery points are:

Material	Delivery Point
Residual Waste	Otterbourne Transfer Station
Dry Mixed Recyclables	Otterbourne Transfer Station
Green Waste	Chilbolton Down Composting Site
Glass	Otterbourne Transfer Station

#### 6. **Proposed Pilot Scheme**

- **Operational Issues**: the pilot would assist in determining best operational practices for the future including loading, vehicle type(s), crew sizes, optimum number of households per round, number of trips to delivery points, suitability of collected materials for recycling / composting, customer satisfaction, etc.
- Area Covered: ideally based on an established round collecting from 4,000 to 5,000 households with a mix of urban and rural properties and cover complete days in order to obtain accurate weighbridge data for comparative purposes.
- **Participants**: the service would be offered to all householders within the pilot area, with appropriate variations for flats, etc. Participation in recycling and composting collections would be voluntary allowing householders to choose which waste fractions they wished to separate in combination with alternate weekly collection of all waste fractions and a compulsory ban on the disposal of garden waste in refuse bins.
- Enquiries and Complaints: the Council would manage all initial enquiries and complaints before and during the trial and, ideally, a separate 'hot line' would be set up for this purpose. Necessary actions would then be forwarded to Serco.
- **Project Plan**: Appendix 4 provides a provisional project plan for a trial scheme.

## 7. **Promoting the Scheme**

Before and during the trial there would need to be an extensive publicity and promotional campaign. The campaign would utilise best practice and methodology developed in partner authorities and through previous Project Integra campaigns. One of the main purposes of the campaign would be to ensure that the benefits of providing an enhanced collection service were not offset by an inordinate increase in the total amount of waste collected.

The campaign would therefore encourage waste reduction and increasing the quantity of dry mixed recyclables collected. This would be targeted particularly at householders not currently participating in the 'kerbside' recycling scheme. Quality would also be emphasised to ensure that as far as possible the materials set out for collection were suitable for recycling and centralised composting. Home composting would also be encouraged – particularly of kitchen waste.

Methods of promotion would include mail and publicity drops and community engagement via parish councils, local groups, roadshows and 'door stepping' aimed particularly at households requiring assistance with the new collection arrangements.

#### 8. **Monitoring and Evaluation**

In addition to monitoring participation rates, amounts of the various waste fractions collected and overall impacts on the waste stream, it would be necessary to monitor and evaluate customer satisfaction and views. Particularly, on completion of the pilot, an assessment of whether or not householders considered that, overall, the changes were an improvement on previous arrangements.

#### 9. **Resourcing the Changes**

Appendix 5 provides estimated costs of undertaking alternative pilot schemes, each of a year's duration, on one round of up to 5,000 properties.

Estimates of the cost of rolling out a scheme district wide would be informed by the factual information gained through undertaking a pilot.

In addition to collection costs, and the costs of publicity and promotion, community engagement, monitoring and evaluation, there would be the purchase and distribution of containers for green waste and possibly glass. Also, subject to Council policies in respect of the proposed service, there could be the cost of providing larger wheeled bins and disposal / cleaning / storage / re-issuing of large numbers of exchanged bins.

#### 10. Waste Reduction Policies

To gain maximum benefit from any new arrangements: to reduce waste growth and improve recycling performance; it would be necessary to have in place clear and robust supporting polices. These would relate to the provision and replacement of bins and other containers, permitted bin sizes and numbers of containers per household and 'side' waste. Appendix 6 provides a summary of current policies and initial consideration of 'new' policies to encourage householders to reduce residual waste and segregate more material for recycling and composting.

# Estimated Arisings (Tonnes p.a.) & Performance - Current and Proposed Schemes

<u>Materials / Source</u>		<u>Current</u>		Proposed 3 Fraction	Proposed 4 Fraction
Collected Residual Household Waste		33,740	(-20% =)	26,992	26,992
Highways Sweepings and Litter		2,040		2,040	2,040
Community Clinical Waste		40		40	40
Dog Bin Waste		50		50	50
WCC Recycling & Composting Schemes (	Total)	7,770		15,850	18,090
Kerbside Rejects / Contaminants		300		1,020	1,020
Total Waste Arisings		43,940		45,992	48,232
WCC Recycling & Composting Scheme	<u>s</u>				
Kerbside Dry Mixed Recyclables (DMR)		6,000		10,200	10,200
DMR Rejects / Contaminants	(at 5%)	-300	(at 10% =)	-1,020	-1,020
Kerbside Glass (inc. 600 tonnes diverted from glass	banks)	0		0	2,840
Glass Banks		1,600		1,600	1,000
Clothing / Textiles Banks		200		200	200
Mixed Paper Banks		220		220	220
Book Banks		40		40	40
Shoe Banks		10		10	10
Garden Waste (assuming free collection service)		0	(including 1,000 tonnes diverted	4,600	4,600
Total Recycled / Composted		7,770	from CA sites)	15,850	18,090
Performance Indicators					
Percentage Recycled (BVPI82a)		17.68		24.46	27.97
Percentage Composted (BVPI82b)		-		10.00	9.54
Overall Recycling/Composting Rate	17.68	(Statutory target = 36%)	34.46	37.51	

# Provisional Project Plan for a Pilot Scheme

Programme subject to Council approval, delivery periods for containers, vehicles, etc.

Activity	Month																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Develop Specification																						
Order Containers / Vehicle*																						
Develop Publicity Package																						
Publicity and Promotion																						
Community Engagement																						
Distribution of Containers																						
Implement Pilot and Run																						
Monitor Materials Quality																						
Monitor Participation																						
Evaluation Survey																						
Evaluation Report																						
Decision to Proceed																						
Pilot Ends or Continues?																						

\* There is currently a significant delivery period for bulk orders of the various containers given the large number of authorities currently introducing new schemes to meet their statutory recycling targets. For vehicle purchase, delivery time from placing of order is currently up to six months.

# **Estimated Costs of Pilot Schemes**

	Cost	Cost
Elements	(without Glass)	(inc. Glass)
	£	£
Contractor Costs (based on twelve month trial) *		
Collection - Additional Labour	35,000	90,000**
- Additional Vehicle(s)	25,000	70,000**
Purchase of Green Waste Bags***	5,000	5,000
Distribution of Bags	2,000	1,500
Purchase of Containers for Glass***	N/A	21,000
Distribution of Containers for Glass	N/A	1,500
Supply and Delivery of Additional / Replacement Bins****	63,000	63,000
Project Development and Promotional Costs		
Production of Publicity / Information	12,000	12,000
Distribution of Publicity / Information	8,000	8,000
Waste Quality Analysis	10,000	10,000
Customer Evaluation	15,000	15,000
Community Engagement	30,000	30,000
Total Estimated Costs	205,000	327,000
Capital	70,000	92,000
Revenue	135,000	235,000

#### Notes:

- \* These are current costs and do not include for future RPI increases.
- \*\* Cost includes provision of 'mop up' team for 2 days a week to collect contaminated materials not collected by the pilot round crews and for subsequent delivery of containers to households not included in initial bulk delivery (only considered necessary with four fraction option).
- \*\*\* Purchase of containers includes Serco oncost of 10% to cover administration, storage, handling, etc.
- \*\*\*\* It is assumed that up to 50% of households would request an additional or replacement bin, either for recycling or refuse, and that these would be supplied under current contract rates. Replaced bins would become the property of Serco for subsequent disposal or cleaning, storage and re-issue.

## Current and Proposed Waste Management Policies

#### **Refuse Collection**

- 1. Since 1993 there has been a subsidised charge for the provision of refuse bins to new properties and additional and replacement bins to existing properties. Charges are linked to RPI under the contract with Serco. The charge to householders is currently £15.64 inclusive of delivery and VAT (similar to the purchase price of a good quality, standard dustbin from a local DIY or hardware store). Average charge to the Council per bin issued is approximately £20.
- 2. There are two sizes of bin available for domestic refuse collection, 120 and 240 litre. Around 80% of households use 240 litre bins for their refuse. A further 10-15% of households have 120 litre bins. The remainder either share communal facilities (mainly people in flats) using a variety of bin types and sizes up to 1100 litre capacity or use their own plastic sacks where it is not practical for wheeled bins to be used (i.e. small, terraced properties with no rear access).
- 3. Although the majority of households only have a single bin for their refuse, there is no limit to the number of bins a householder may put out for collection each week. The stipulation is that these should only contain normal domestic waste including light garden waste such as grasscuttings, prunings, leaves, plants and weeds with small quantities of soil attached.
- 4. Refuse collection is weekly and, under the terms of the contract specification, there is no collection of 'excess' or 'side' waste except after Bank Holidays or in exceptional circumstances.

# Collection of Dry Mixed Recyclables

- 1. In 1998, 140 litre wheeled bins were introduced as an alternative to the use of plastic carrier bags. To date, approximately 30,000 households have requested and received recycling bins, albeit a small number share a bin with a neighbour. A further 2,000+ households, mainly flats, share communal recycling bins of various sizes.
- 2. Bins for recycling, including replacements, are provided by the Council free of charge to householders. Under the contract with Serco, cost to the Council per 140-litre bin issued is £19.84.
- 3. An estimated 10-15% of households continue to use carrier bags for the collection of their recyclable waste either because they do not generate enough material to warrant a bin or have insufficient space to store one.
- 4. Each household is entitled to collection from a single 140-litre bin, although extra recyclables will be taken if put out for collection in plastic carrier bags, white or clear bin liners.
- 5. Recyclables are collected fortnightly, on the same day as refuse collection.

# The Case for Change

- 1. Under the present policies, there is no restriction on householders' residual waste capacity (i.e. the volume of refuse bin space available per week). This situation does not encourage waste reduction or the maximum separation of materials for recycling and composting.
- 2. Winchester's residents produce a high volume of waste per household (close to the worst performing 25% of districts) which counteracts their recycling efforts.
- 3. There is experience within Hampshire of a stepping down in the volume of residual waste collected. This is associated with the banning of garden waste from refuse bins and changed collection systems generally.
- 4. Conventional waste collection systems such as Winchester's (i.e. weekly refuse collection with fortnightly kerbside collection of dry mixed recyclables and a network of bring sites) typically achieve recycling rates in the order of 20%.
- 5. Winchester's statutory recycling performance target is 36% for 2005/06. This cannot be achieved under the present systems and methods of waste containment and collection.
- 6. Therefore, to meet the statutory target, there is a need to implement a range of policies aimed at maximising recycling and minimising residual waste by encouraging householders to manage their waste in a more responsible manner and participate in waste reduction as well as recycling / composting. Possible options are summarised below.

# **Collection Arrangements**

- 1. **The Standard Service:** to provide a standard 'free' collection per household of:
  - A single wheeled bin for residual waste and (as now) a single wheeled bin plus unlimited number of carrier bags, white or clear sacks or bin liners for dry mixed recyclables, and:
  - A single bag for garden waste and (possibly) a plastic box or basket for glass.
- 2. **Frequency:** Each waste fraction to be collected fortnightly on an alternate weekly (AWC) basis.
- 3. Customer Choice: each household allowed a maximum of 1 x 240 litre bin for refuse and 1 x 240 litre bin for dry mixed recyclables. Thus, could alternatively have 1 x 240 + 1 x 140 or 2 x 140. Self-adhesive labels could be used to identify which bin was used for which fraction. Standard issue for all new households to be 2 x 240 bins unless smaller bins are requested. Existing households with 140 litre recycling bins permitted to swap their bins over or exchange the 140 for a 240 litre bin either free or for a (possibly subsidised) charge. As now, no charge for householders in receipt of means tested benefit.
- 4. **Enhanced Service:** to provide householders with additional bags for garden waste at (a suggested) £25 per bag per year.

- 5. **Voluntary Participation:** householders to decide which elements of kerbside collection of dry mixed recyclables, green waste and, possibly, glass they wished to participate in. But residual waste collection limited to the emptying of one wheeled bin every two weeks.
- 6. **Larger Households:** some flexibility on number of bins for larger households, student households, etc. For example, households of 6 or more persons to be allowed a maximum of 3 x 240 litre bins for the collection of their residual waste and dry mixed recyclables.
- 7. **Small Properties:** households unable to use wheeled bins to be entitled to the collection of a maximum of (say) three black plastic sacks of residual waste with an unlimited number of carrier bags, white or clear plastic sacks or bin liners for dry mixed recyclables. Also, one bag for garden waste and (possibly) one box or basket for glass.
- 8. Bin Provision Generally: possible options include to:
  - Phase out the use of 120 litre bins and standardise on 140 and 240 litre bins.
  - Standardise on a single bin size for both refuse and recycling collections (e.g. the 160 or 180 litre bins now produced by some manufacturers).
  - Encourage the use of smaller refuse bins by charging householders less for the provision of a 140-litre bin.

#### **Restrictive Policies**

- 1. **Collection of Garden Waste:** a prohibition on the collection of garden waste except in the prescribed bags (once an alternative means of disposal is available).
- 2. **Refuse Containing Garden Waste:** refuse obviously containing garden waste not to be collected.
- 3. **Contamination of Garden Waste:** collectable garden waste would include grass cuttings, leaves, light prunings, plants and weeds with small amounts of attached soil. Kitchen waste, general waste, rubble, building or other such material, larger amounts of soil or stones, etc. would not be accepted.
- 4. **Contamination of Recyclables:** dry mixed recyclables contaminated with general refuse, green waste, food or other materials likely to prevent the recyclables being processed not to be collected.
- 5. **Contamination of Glass:** glass contaminated with other materials including crockery not to be accepted.
- 6. **Excess or Side Waste:** no collection of 'excess' or 'side' residual waste except after delays caused by Bank Holidays (as now).
- 7. **Overfilling / Overloading of Bins:** no emptying of bins if lids too open for mechanical emptying without the risk of spillage (or to avoid misunderstandings over this issue, a 'lid completely closed' policy could be operated). Also, no emptying of bins too heavy to be moved by one collection operative.

# Event **Possible Solutions** Vehicle breakdown with risk of missed Sufficient spare vehicles to be available. collections. Contamination, of dry mixed recyclables, Assess geographical areas where this is green waste or glass, affecting whole loads most likely to have arisen. and resulting in material being unsuitable for processing and therefore rejected. Undertake targeted publicity campaign in these areas aimed at reducing contamination. Identify main offenders and take action to seek their co-operation in eliminating contamination. Plan rounds so that areas most likely to have such a problem can be isolated. Finally, accept that in some circumstances material will not be suitable for processing and divert this waste to general disposal. Inform residents and media why this action has been necessary. Green waste turns anaerobic. Consider alternative means of processing (none currently available). Consider alternative method and / or frequency of collection (including costs). Accept that in some conditions anaerobicity will occur and divert waste to general disposal. Inform residents and media why this action has been necessary. Strict compliance with specified start time Noise complaints from the sound of breaking glass during collection. of no earlier than 7.00am in majority of residential areas. Spillage / breakage of glass through: - Accidents during collection Crew to carry necessary equipment for immediate clean up. - Vandalism Notify Police of instances of vandalism.

# Pilot Scheme – Preliminary Risk Assessment

# Summary of Options for Increasing the Recycling / Composting Rate

Option	Estimated Recycling / Composting Rate	Estimated Additional Revenue Cost (pa)	Comments / Other Implications
<ol> <li>Present arrangements (weekly refuse + fortnightly recycling collections + network of 'bring' sites)</li> </ol>	18% (Actual)	N/A	N/A
2. Continue present arrangements but allow householders to swap their refuse and recycling bins	19-20%	N/A	Some increase in excess refuse and the contamination of recyclables with refuse
3. Continue present arrangements but offer larger bins or sacks for recycling (either free or subsidised)	21-22%	Up to £60K depending on 'take up' of larger bins or sacks	Capital cost of bin replacement + cost of dealing with large number of replaced bins. Revenue cost of sack provision
<ol> <li>Continue present arrangements + introduce chargeable fortnightly garden waste collection service with ban on garden waste in wheeled bins</li> </ol>	20-21%	Dependent on level of charge	Negligible participation + garden waste ban difficult to enforce
<ol> <li>Continue present arrangements + establish more 'bring' sites for glass and textiles</li> </ol>	21-22%	Up to £10K	Negligible impact + difficulty of finding suitable locations for new sites
<ol> <li>Continue present arrangements + introduce free fortnightly garden waste collection service</li> </ol>	25-26%	£250-350K	+ Cost of bags for garden waste & distribution
<ol> <li>Present arrangements with compulsory bin swap &amp; free fortnightly garden waste collection service</li> </ol>	29-31%	£310-410K	As 6. + some contamination of recyclables with refuse + potential difficulties over ownership of present refuse bins
8. Increase frequency of recycling collections to weekly	23-24%	£250-350K	Spare capacity in refuse bins taken up with additional garden and other waste
<ol> <li>Increase frequency of recycling collections to weekly &amp; reduce refuse collection to fortnightly</li> </ol>	27-28%	Up to £60K	Significant contamination of recyclables with refuse + some bin replacement
10. Alternate weekly collections of refuse and recyclables (AWC)	28-29%	Saving of £190-350K	£400-500K capital cost of bin replacement + cost of managing large number of replaced bins
11. AWC + chargeable fortnightly garden waste collection service, aimed at the Council achieving its statutory target	31-32%	AWC saving offset by cost of garden waste	As 10. above + negligible participation in garden waste service
12. AWC + free fortnightly garden waste collection service	Up to 35%	£160-250K	+ estimated £250K for garden waste bags, additional bins & distribution
13. As Option 11 + fortnightly kerbside collection of glass	37-38%	Up to £700K	As 12. + additional £125K for boxes or baskets for glass and distribution