

## WIRRAL COUNCIL

### SUSTAINABLE COMMUNITIES OVERVIEW & SCRUTINY COMMITTEE - 7<sup>TH</sup> JUNE 2011

<b>SUBJECT:</b>	<b>REVIEW OF WINTER WORKING RESILIENCE ARRANGEMENTS - ENVIRONMENTAL SERVICES CONTRACT WITH BIFFA</b>
<b>WARD/S AFFECTED:</b>	<b>ALL</b>
<b>REPORT OF:</b>	<b>DIRECTOR OF TECHNICAL SERVICES</b>
<b>RESPONSIBLE PORTFOLIO HOLDER:</b>	<b>STREETSCENE &amp; TRANSPORT SERVICES</b>
<b>KEY DECISION?</b> <i>(Defined in paragraph 13.3 of Article 13 'Decision Making' in the Council's Constitution.)</i>	<b>NO</b>

#### **1.0 EXECUTIVE SUMMARY**

- 1.1 This report has been prepared as part of an ongoing Workstream and in response to a request by the Council, to undertake a review of the arrangements for providing refuse collection services during periods of severe winter weather.
- 1.2 The report outlines the current severe weather working arrangements and includes details of what lessons have been learnt as a result of the disruptions to services during previous winter periods and specifically during the latest conditions experienced during November 2010 to January 2011.
- 1.3 As part of the review, the Council's Environmental Services contractor, Biffa, have been requested to explore a number of options for minimising any disruption to collection schedules during any future periods of severe winter weather. This work has taken into account experience in other authorities, along with Biffa's direct experience from collection contracts that they have elsewhere.
- 1.4 Biffa have recommended that two key initiatives be introduced. These are aimed at reducing the risks arising from vehicles losing control on snowy and icy roads and reducing the corresponding risks to refuse operatives collecting bins on icy pavements and roads and include:
- The use of overshoe 'crampon' type footwear for refuse collection staff.
  - A trial of winter tyres on a selection of the refuse collection fleet with a view to evaluating their effectiveness and assessing the full implications of expanding their use to the full fleet of vehicles.

- 1.5 A full presentation of the background to the work, the options explored and the conclusions/recommendations arising will be given to Members of the Committee by Biffa management staff at the meeting.
- 1.6 Biffa have also made an offer to supply support to gritting operations and undertake gritting of those roads not normally gritted, immediately prior to scheduled refuse collection days. This offer is currently being considered in detail by the Council's Highway Manager and will be subject to a separate update to the Committee in September of this year.

## **2.0 RECOMMENDATION/S**

2.1 Committee is requested to:

- i) Note the results of the 'Lessons Learnt' exercise as detailed within section 5.0 of this report, along with the actions taken by officers to provide further improvements to the Council's severe weather plan for Environmental Services.
- ii) Note the outcome of the Biffa Partnering Workstream in this area, as outlined within Section 6.0 of this report and endorse the recommendations arising from the review as contained within sections 7.1, 7.2 and 7.3 of this report.

## **3.0 REASON/S FOR RECOMMENDATION/S**

3.1 Members are requested to endorse the recommended way forward resulting from the Biffa Partnering Workstreams to improve the resilience of the refuse collection service in extreme winter conditions.

## **4.0 BACKGROUND AND KEY ISSUES**

- 4.1 A report was presented to the Council meeting held on 14<sup>th</sup> February this year, containing an update on the winter resilience plans currently in place, to maintain all key Council services during periods of severe weather.
- 4.2 At the meeting in February, Members requested that, following meetings between the Cabinet Member, senior officers and managers from Biffa, the Director of Technical Services was to ensure that arrangements for waste collection during severe weather are considered in a renegotiation of the waste collection contract. This work was scheduled to take place in any event, as part of the Biffa Partnership Workstream programme endorsed by this committee earlier this year.
- 4.3 This report details the results of the results of the Workstream review and specifically the operational review of winter working options undertaken by Biffa. Also included are details of the general progress made by officers in this area and the lessons learnt/actions arising from last winter's events.

## **5.0 'LESSONS LEARNT' FROM RECENT PERIOD OF SEVERE WEATHER**

5.1 The aim of the 'lessons learnt' exercise was to:

- Take stock of the level of services that were maintained during the recent period of severe weather via the Council's severe weather plan.
- Recognise those initiatives that went well and should be retained and enhanced if possible.
- Identify areas where potential improvements can be made. This will include consideration of any good practice points arising from those authorities who have managed to maintain 'normal' collections during severe weather periods.

Consideration and further expansion on the above have been detailed below.

### **5.2 Services Maintained Via Existing Severe Weather Contingency Plan**

The plan, which has been developed and agreed via the Biffa Liaison meeting and Partnering Board, details arrangements for maintaining refuse collection and cleansing services during severe weather periods. The plan in place prior to last year's events (November 2010), was further developed as a result of experience gained during the subsequent periods of bad weather and will be updated in line with the agreed work stream during the coming year.

The main aims of the current plan are as follows:

- To minimise the overall disruption to refuse collection and recycling services, as a result of any interruptions to normal services arising from severe weather such as icy/snowy conditions.
- To facilitate timely and co-ordinated decisions in respect to initially suspending and subsequently implementing plans to catch up with any backlog in collections.
- To ensure that an approach is agreed and understood, in advance of any disruptions, by all relevant parties.
- To maintain effective communication with members of the public, councillors and other key stakeholders, during periods of severe weather conditions.
- To make the best use of all operational resources available.
- To give priority to collecting high risk waste streams (e.g. residual waste) over lower risk waste streams (garden waste), during periods of disruption.
- To ensure that normal services are resumed as soon as is reasonably practical.

### **5.3 What Elements of The Plan Went Well?**

The revised plan and associated arrangements, took into account lessons learnt from previous winter periods and resulted in an improved response in the following areas:

1. Use of Biffa street cleansing operatives as part of the Council's winter resilience efforts on snow clearance and gritting pavements in key

shopping centre areas. This was undertaken as part of a coordinated approach working in conjunction with Council Highway staff, contractors and other agencies.

- II. Improved responsiveness to the situation via continuous clear communication between Biffa and Council managerial and operational contract staff and 'End of Day' meetings to assess the level of service provided during that day and review future contingency/catch up plans.
- III. Improved internal communications within the Council via daily breakfast emergency planning and co-ordination meetings involving all key managerial operational and customer services staff within Technical Services.
- IV. Improved external communications with householders via; daily 'live' web site updates, use of local media such as radio and press, Call centre updates and updates at area offices.
- V. The introduction of local temporary bring sites, (refuse vehicles), at strategically located car parks across the Borough.
- VI. Improved communications with MWDA, this included daily contact with MWDA contract management staff to advise of likely tonnages and agree tipping arrangements.

#### **5.4 Where Can Further Improvements Be Made?**

A number of areas have been identified where, if possible, an improved response could be provided. These have been based on our own operational experience, feedback from Wirral's residents and requests made by members.

##### *5.4.1 Collections In Roads Which Have Been Gritted*

The vast majority of residents are understanding and accept the difficulties associated with working in roads with significant amounts of snow and ice. However, it is difficult to explain to residents why collections are not made in those roads that have been gritted, or have minimal amounts of snow and ice.

The main reason behind this being the risk to refuse operatives in pulling loaded bins across icy pavements, whilst trying to maintain normal working productivity levels, in the region of 1,500 bins/loader/day.

Options for addressing this situation have been included within the operational review referred to in section 6.0 below.

##### *5.4.2 What Happens In Other Authorities?*

Members have previously requested that officers investigate:

- What level of services have been maintained in those authorities that have managed to maintain collections?
- Steps taken to maintain services?
- Implications for operations – productivity, accidents etc.

As part of this exercise a brief survey was conducted with a number of neighbouring authorities, along with a selection of authorities across the country who have reported that they maintained collections throughout the periods of severe weather.

The results of the surveys have been shared with Biffa as part of their own review and again have been incorporated within the proposals outlined within section 6.0 of this report.

#### *5.4.3 What Measures Can Be Taken To Work In Roads Subject To Snow & Ice?*

The results of this work have been included within the review of refuse collection operational issues included section 6.0 below.

#### *5.4.4 Improved Working With the MWDA*

The review identified the need for improvements when producing forward projections of collection tonnages provided to the MWDA, both during and after severe weather periods. There is also a need to maintain closer communication with MWDA contract staff to agree disposal outlets and co-ordinate these with collection operations. These areas were tightened up and improved on towards end of latest period, but these improvements need to be sustained and built upon during future events.

A number of issues linked to the availability of tipping facilities were also identified during this period including:

- An apparent lack of capacity at Bidston to deal with anything much above 'normal' daily tonnages of residual waste.
- The inability of Bidston to deal with excess dry recyclable material collected in plastic refuse sacks.

The above and the use of alternative contingency tipping arrangements resulted in:

- Increased travel times and costs for Biffa vehicles travelling to alternative tipping locations outside of the Wirral.
- Reduced time available for 'catch up' collections due to increased travelling times to alternative tipping facilities.
- Problems caused by tipping at landfill.

A meeting was arranged, by the Interim Director of Services, with MWDA senior contract officers to determine what can be done to gain an improved understanding of respective operational issues and what needs to take place collectively to get best use out of current arrangements.

This resulted in an Adverse Weather Contingency Plan for waste management operational being issued by the MWDA. This plan is being monitored and progressed by the Merseyside Joint Waste Partnership officer group.

## **6.0 WORK UNDERTAKEN AS PART OF WORKSTEAM REVIEW**

6.1 This work has been progressed via the Biffa Liaison meeting and Partnering Board and the detailed report, produced by Biffa, has been included at Appendix A to this report. A full presentation of the background to the work, the options explored and the conclusions/recommendations arising will be given to Members of the committee by Biffa management staff at the meeting.

Biffa, working in conjunction with the Council's Waste & Environmental Services Manager have explored a number of options for maintaining (as far as possible) 'normal' collection schedules during any future periods of severe winter weather.

The work has taken into account experience in other authorities, along with Biffa's direct experience from collection contracts that they have elsewhere.

The options are aimed at reducing the risks arising from vehicles losing control on snowy and icy roads and reducing the corresponding risks to refuse operatives collecting bins on icy pavements and roads and include:

- The use of snow chains, 'socks' and winter tyres on refuse freighters.
- The use of overshoe 'crampon' type footwear for refuse collection staff.

The key recommendations arising from this work have been summarised within sections 7.1 to 7.3 below:

## **6.2 General Contractual Requirements**

The Council's contract specification allows for the suspension of refuse collection services if, in the opinion of Biffa (and subject to agreement by the Director of Technical Services) conditions are such that work is 'impracticable or dangerous'.

Following recommencement of the service, collections are to be resumed and/or 'caught up' in accordance with the agreed plan.

No additional payment will be made to the Contractor in respect of any additional expense in complying with the 'catch up' requirements.

The proposals outlined below and some of those currently in place (e.g. the use of temporary bring sites), potentially represent a variation to the existing contractual requirements and have/will be subject to the usual negotiations in place to discuss and agree such changes.

However, in this respect, it should be noted than any proposal to minimise disruptions to collections, results in benefits to both parties. The Council

benefits from an obvious improvement in service (in comparison to past arrangements). Biffa benefit from a reduction in catch up costs arising from working longer hours and/or weekends to catch up any missed work.

## **7.0 RECOMMENDATIONS ARISING FROM WORKSTREAM REVIEW**

It is worth highlighting that the sheer size, in terms of number of vehicles, of the Wirral operation results in significant problems in consideration of any options relating to fitting vehicles with snow chains, tyres etc. Whilst other authorities may be able to successfully implement these options, this is likely to be as a result of the fact that they have a significantly smaller operational fleet and as a result this makes it easier to fit and/or remove tyres etc to vehicles in good time to meet changing weather conditions.

Accordingly, the recommendations arising from this report have been produced very much with the above point in mind. In doing so Biffa have attempted to get the correct balance between what can be realistically achieved, from an operational viewpoint, the increased costs and any gains in service arising from the proposals.

### **7.1 Recommendation 1 - Use Of Snow Shoes By Refuse Collection Staff**

Biffa, in conjunction with the appropriate staff representatives, have undertaken extensive trials (during visits to Scotland) of a range of footwear. A preferred overshoe has now been selected and orders are being placed in time for the forthcoming winter period.

Using overshoe 'crampon' types should allow crews to safely walk on a greater number of roads/areas, which in turn should allow significantly more work to be completed in areas where roads have been gritted and/or free of ice and snow.

Accordingly, rather than suspend collections across the whole Borough, following any significant event, Biffa should be able to complete collections to approximately 20% more properties in areas where roads are normally gritted.

As well as the obvious improvements in service levels, this will help to address a major area of criticism from Wirral's residents and members during previous severe weather events, i.e. "I live on a road which has been gritted, but my bins have still not been collected – why not"?

### **7.2 Recommendation 2 - A Selective Trial of Winter Tyres on Refuse Freighters**

It is proposed that 10% of the refuse fleet (i.e. 4 refuse freighters) be fitted with snow tyres during the winter period of November/December to February/March.

In this way a properly controlled trial can be undertaken to assess the full implications (operational and cost) of using winter tyres in the context of the Wirral service. This in turn will enable a properly informed cost/benefit analysis to be undertaken in consideration of any subsequent proposal to fit tyres to all 40+ refuse collection vehicles deployed on the Wirral contract.

### **7.3 Recommendation 3 - An Offer to Use Biffa Drivers To Pre-Grit Refuse Collection Routes.**

Biffa have offered to supply drivers and organise the pre-gritting of refuse collection routes immediately prior to scheduled collection days. This would require that the Council supply the gritting equipment (vehicles) and salt.

The Council's Highway Manager will give further examination of the detailed implications arising from this proposal, during the summer, with a view to preparing a further detailed report to this committee in September.

## **8.0 RELEVANT RISKS**

- 8.1 The key risk relates to the reputational risk arising from maintaining an acceptable level of service during such periods. Whilst statutory requirements are non-specific in terms of waste collection frequency, the main aim of the service is always to ensure that disruption is kept to the minimum, missed work is caught up as quickly as possible and normal collection schedules are resumed in good time.

## **9.0 OTHER OPTIONS CONSIDERED**

- 9.1 An evaluation of all options considered has been outlined within Appendix A to this report.

## **10.0 CONSULTATION**

- 10.1 No specific consultation has been undertaken on this issue. However, comments made by Wirral's residents, during previous periods of severe weather, have been taken into account in preparation of this report.

## **11.0 IMPLICATIONS FOR VOLUNTARY, COMMUNITY AND FAITH GROUPS**

- 11.1 None

## **12.0 RESOURCE IMPLICATIONS: FINANCIAL; IT; STAFFING; AND ASSETS**

### **12.1 Financial Implications**

As stated in the Biffa report contained within Appendix A, it is proposed that the Council meet the purchase cost of the tyres and it is suggested that a working budget of no more than £20,000 be set-aside for this purpose.

The Director of Technical Services will provide a further report to Members containing a full evaluation of the results of the trial of winter tyres. This report will also include the full financial implications of extending the trial, or



otherwise, against the background of any wider negotiations with Biffa, relating to services delivered under the contract as a whole.

### **13.0 LEGAL IMPLICATIONS**

13.1 None

### **14.0 EQUALITIES IMPLICATIONS**

14.1 The proposals in this report will have a favourable impact on protected groups as they are aimed at improving the reliability and accessibility of refuse collection services during severe winter weather period.

### **15.0 CARBON REDUCTION IMPLICATIONS**

15.1 None, that can be easily quantified, although any proposal to use collection resources more efficiently, should result in a carbon benefit in terms of reduced fuel usage and carbon emissions.

### **16.0 PLANNING AND COMMUNITY SAFETY IMPLICATIONS**

16.1 None

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### **APPENDICES**

Appendix A - Review of Operational Options For Maintaining Waste Collection Services During Periods of Severe Winter Weather – Biffa Waste Services – 5<sup>th</sup> May 2011

### **REFERENCE MATERIAL**

*(Include background information referred to or relied upon when drafting this report, together with details of where the information can be found. There is no need to refer to publicly available material: e.g. Acts of Parliament or Government guidance.)*

### **SUBJECT HISTORY (last 3 years)**

<b>Council Meeting</b>	<b>Date</b>

## **Appendix A**

### **Wirral Council Waste & Environmental Services Contract**

#### **Review of Operational Options For Maintaining Waste Collection Services During Periods of Severe Winter Weather**

##### Background To Review

As part of an ongoing partnership work stream and following requests from Wirral's members at a meeting held in January of this year, a number of options have been explored for maintaining 'normal' collection schedules during any future periods of severe winter weather.

These options are aimed at reducing the risks arising from vehicles losing control on snowy and icy roads and reducing the corresponding risks to refuse operatives collecting bins on icy pavements and roads and include:

- The use of snow chains, 'socks' and winter tyres on refuse freighters.
- The use of overshoe 'crampon' type footwear for refuse collection staff.

##### Snow Chains Fitted To Tyres of Refuse Collection Vehicles

The chains are not believed to be effective in terms of usage as they can only be fitted/ used when the roads have got snow/ice on them. Given the fact that it takes at least an hour to fit this would mean that the whole fleet on RCV's would take 40 plus hours to fit.

Accordingly, some three working days would be lost just fitting the chains every time snow and ice affected the operation. As well as the obvious disruption to collection services, weather conditions may well ease in the time taken to fit the chains.

A further consideration is the potential damage that can be caused to roads that have been gritted and are therefore free of snow/ice and the resulting road repair implications including the increased highway maintenance costs to the Council.

Finally, for safety reasons, vehicles fitted with snow chains are limited to speeds below 30mph and therefore prevented from travelling on major roads and motorways. Ordinarily this may not be a major issue but past experience has resulted in the inability of Bidston to cope during severe weather periods and as a result, Wirral vehicles being diverted to alternative tipping sites well outside of the Borough boundary.

In consideration of the above issues, and given the potential time to put snow chains on all of Wirral's 40+ vehicles, they are not considered to be a viable option.

##### 'Snow Socks' Fitted to Tyres of Refuse Collection Vehicles

A second option considered would be the use of "Snow Socks". However again these are not felt to be an effective solution due to the very short lifespan that these offer. From discussions with fleet and suppliers this are not expected to last longer than a few days making them a very expensive and time consuming option. In

addition they must be removed whenever the vehicle is driving on treated roads meaning even greater delays and problems.

#### Fitting Winter Tyres To Refuse Collection Vehicles.

The final option in terms of the vehicles is to consider fitting “winter tyres”.

These offer increased grip due to the design of the tyre. However these can quickly become worn if the road conditions are not suitable (snow and ice) meaning that they would have to be replaced more frequently than normal tyres. From talking to our regional fleet engineer the costs for the tyres would be in the region of £450-500 each making a total cost of approx £170,000 allowing for some 350 tyres across the fleet of RCV's. It is estimated that to fit these would take approx 3-4 hours a truck meaning up to 160 hours.

If they are fitted in advance this would reduce this disruption but in conditions without snow and ice the tyres are likely to last only a couple of weeks.

A further option, which would help them to last longer, would be to purchase the wheels as well, which would mean it would be a case of changing over the whole wheel. The time element for this option could be prohibitive with the storage and purchase costs also being very expensive (Estimated £600 per wheel £210,000).

With fitting the snow tyres it is certain that fuel efficiency will be reduced. It is expected that this will drop by over 20% further increasing the costs to the service.

Even with snow tyres fitted there is no guarantee that safe driving conditions can be maintained for heavily loaded RCV's, particularly on icy roads in tight/hilly areas where parking restricts manoeuvrability of the vehicles.

This option to use snow tyres, potentially represents the best solution from an operational viewpoint. However, the Biffa and the Council would need to consider the significant additional costs associated with fitting and maintaining winter tyres throughout the winter period against any service benefits gained. There is a risk that this money may be wasted in the event that conditions are such that these measures are not required during any given winter season.

#### Winter Working PPE For Refuse Drivers/Loaders

In terms of the equipment for the staff to be able to walk/work in this type of environment a number of trials of “crampon” type overshoes have been tried. These have shown up issues with various types but one type was found to aid walking in both snow and ice for the operatives. The cost for these is approx £11-12 a pair meaning a total cost of around £3,000 based on 250 employees. In terms of how long these last this is not known at present but it is likely that they would last only one season before needing to be replaced.

#### Offer To Provide Supplementary Gritting Operations

To help further improve the service an option could be for the Council to supply additional gritting machines, which Biffa could supply drivers for. This, if the salt is available, would mean that all roads could be gritted in the days work reducing greatly the amount of disruption. The cost for this is difficult to calculate due to the price of the salt required and the possible time to complete the work.

## Conclusions

The sheer size, in terms of number of vehicles, of the Wirral operation results in significant problems in consideration of any options relating to fitting vehicles with snow chains, tyres etc.

Whilst other authorities may be able to successfully implement these options, this is likely to be as a result of the fact that they have a significantly smaller operational fleet and as a result this makes it easier to fit and/or remove tyres etc to vehicles.

Additionally, even with the snow tyres fitted it is not certain that all roads will be completed every day. The extra costs to the contract are likely to reach £400-£500 hundred thousand per winter.

## Recommended Approach

The best option, in terms of dealing with the likely amounts of disruption balanced against the cost, would be the use of snow shoes for the crews, in conjunction with a trial of winter tyres on selected vehicles.

## **Use of Snow Shoes**

This will mean that the crews can safely walk on a greater number of roads/areas meaning a lot more work will be completed in areas where roads have been gritted and/or free of ice and snow. Due to the fact that Biffa have improved on the service every year and the expected improvement due to the snowshoes should mean more roads are completed.

## **Selective Trial of Snow Tyres**

It is proposed that 10% of the fleet (i.e. 4 refuse freighters) be fitted with snow tyres during the winter period November/December to February/March.

In this way a properly controlled trial can be undertaken to assess the full implications of using winter tyres in the context of the Wirral contract, including:

- (i) The actual implications of making a decision on when to fit the tyres and how long they should remain on the vehicles for.
- (ii) How effective are the tyres under typical operating conditions.
- (iii) How long do the tyres last, in comparison with the normal harder compound tyres.
- (iv) What is the actual increase in fuel arising from the use of these tyres and how significant is this.
- (v) Any other relevant issues attached to the use of snow tyres.

The trial vehicles can be selected from those vehicles, which tend to be used least over the period i.e., those used to collect green waste (collections being normally suspended during the Christmas/New Years period). A decision to initially fit the tyres can be taken against the background of medium/short term forecasts predicting a significant period of snow/ice which is likely to disrupt collection services. The Council's established emergency planning procedures can be used to inform this decision. Additionally unnecessary tyre wear can be restricted as these

vehicles are not normally 'off the road' for a significant proportion of the time during this period in any event.

Following the trial, a properly informed decision can then be taken on the benefits/risks/implications of continuing to use winter tyres on some or all of the Wirral fleet of refuse freighters.

The above, in conjunction with recently established initiatives such as the use of temporary bring sites (via refuse freighters in car parks), will ensure that we will be able to show continuous improvements in this area, during future periods of severe weather.

As stated above Biffa are also keen to explore further the option of providing support (by providing and funding suitably qualified drivers) to undertake supplementary pre-collection gritting of those roads not included on the current gritting routes.

#### Financial Implications

Biffa are prepared to meet the increased costs of supplying and maintaining snowshoes. In terms of the proposed trial of winter tyres on 4 refuse freighters, Biffa would offer to meet the costs of fitting and removing winter tyres along with any increased fuel costs arising from their use.

It is proposed that the Council meet the purchase cost of the tyres and it is suggested that a working budget of no more than £20,000 be set-aside for this purpose.

Mark Hodkinson  
NW (Muni) Regional Support Manager  
Biffa Waste Services  
11<sup>th</sup> May 2011