Economy & Environment Overview and Scrutiny Panel

# Litter Bins





**March 2015** 

### Recommendations

The Task Group make the following recommendations:

- 1. That following the completion of the audit of public litter bins and GIS mapping, each bin should be individually numbered with disc (similar to street lighting columns throughout the district) so that location of bins is easily identifiable.
- 2. That the Litter Bin Guidelines which have recently been drafted include information and guidance on how the Council address the issue of what service will be provided to large new housing developments and employment sites.
- 3. That the education and enforcement undertaken by the Directorate continues and that action is taken against those members of the public and businesses who misuse public litter bins.
- 4. That the use of Big Belly Solar Bins is further explored for areas of high useage.
- 5. That income generation by advertising on litter bins should be further explored if the barrier to maximising income is due to costs of planning applications that a full explanation is provided to Members along with potential solutions.
- 6. That Ward Councillors should be sent a GIS map of the location of litter bins in their ward and are kept involved, consulted with and informed of changes.

## Backgrounds and aims

The Council is currently responsible for over 700 litter bins throughout the Carlisle District. Public litter bins are important in supporting the Council's vision that "Together we will make Carlisle clean and tidy".

The Neighbourhood Services Manager asked the Environment and Economy O&S Panel in the Summer of 2014 to be involved in the project to review the provision in the district. The aim was to look at all aspects of work relating to litter bins and to analyse the locations of street bins within wards looking to see whether they are located correctly according to footfall and litter accumulation.

Cllrs Bloxham, Nedved and Wilson were appointed to the Task Group and agreed the following terms of reference:

- To gather evidence on the number, location, type and usage of public litter bins in the District.
- To consider the resources available and whether they are maximised.
- To look at best practice and new technology in the field.

This report presents the findings of the Task Group.

Task Group Members would like to sincerely thank the officers within Local Environment who assisted and supported them during this work.

### Methodology

Date

Meetings of the Task Group were held on:

Purpose

24 <sup>th</sup> July 2014	Scope review and determine Terms of Reference
however due to a cha	due to meet again on 13 <sup>th</sup> August 2014 to look at the mapping exercise, ange in staffing and problems in collating the audit data the information was meeting therefore postponed.
4 <sup>th</sup> September 2014	Big Belly Demonstration followed by Task Group meeting with Local Environment staff to look at the results of the audit of litter bins.
7 <sup>th</sup> October 2014 8 <sup>th</sup> October 2014 9 <sup>th</sup> October 2014	Cllr Nedved joined street cleaning round Cllr Bloxham joined street cleaning round Cllr Wilson joined street cleaning round
16 <sup>th</sup> October 2014	Task Group meeting to discuss their experience on the rounds and issues arising. Further information provided to group on update on actions following the Audit, update on Big Belly pilot, information on enforcements and complaints relating to litter bins.

The Group were awaiting the feedback from an event hosted by Big Belly Smartbin on 13<sup>th</sup> November, however this was postponed and therefore the Task Group provided the Panel with an interim report at its meeting on 27<sup>th</sup> November 2014.

11<sup>th</sup> December 2014 Update of information from Local Environment Officers and agreed to meet again in February when more information was available.

10<sup>th</sup> February 2015 Agree conclusions and recommendations

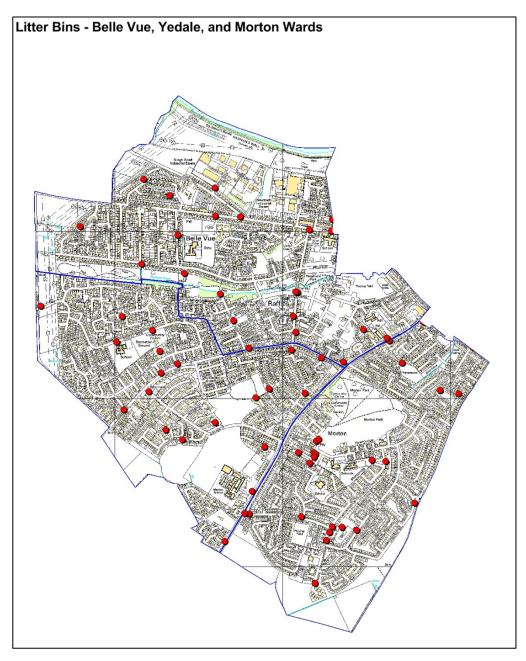
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## Findings

### 1. Audit of Litter Bins

- 1.1. There are over 700 bins throughout the borough, and each of these bins has been spread throughout the city. There is no evidence to suggest that the location of each bin evolved as part of predetermined criteria according to litter, usage or location. Historically litter bins were installed at the request and needs of the local wards as identified by the elected councillor in conjunction with agreement of officers.
- 1.2. In 2011 a decision was made that the replacement of litter bins would be controlled in a manner that prevented any additions to the number of bins within the council without due course and would only be done so as part of a replacement policy of old and ill repair bins, or if a location within a ward was identified by a councillor, then that location would be considered if another underused bin within the ward could be used as a replacement.
- 1.3. The review of litter bins within the wards of Carlisle initially started in 2011, whereby each litter bin already in location was accurately mapped and logged according to each ward within Carlisle. This work stalled and was to be picked up again at the start of this review and would provide the main evidence for the Task Group.
- 1.4. All of the street litter bins within wards would be mapped and reviewed looking to see whether they are located correctly according to footfall and litter accumulation. This would include an exercise to determine the use (and misuse) of litter bins
- 1.5. A full audit of litter bins in the District has been undertaken with the assistance of the Street Cleaning Team. Operatives have mapped and detailed the condition of every bin in the area, many of which required maintenance or replacement. This work is ongoing by officers and the Task Group have been updated of progress.
- 1.6. All litter bins have been mapped on GIS and Officers are able to identify gaps or over provision. An example map is show below of litter bin locations in the Belle Vue, Morton and Yewdale wards.
- 1.7. A full GIS of the Carlisle District is attached at Appendix 1.
- 1.8. Members were informed at the start of this work that Officers would look to change locations according to footfall and/or litter need if required. Several bins have been identified as having little or no litter use and therefore have been, or will be removed.
- 1.9. Members of the Task Group have been consulted on this work over the course of this review and note that this work is still ongoing and will be for the near future.
- 1.10. The Audit was expected to detail the amount of litter in each bin (whether full, half full or empty) and whether there was evidence of trade, household or garden waste.

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- 1.11. It is possible to identify from the exercise that municipal litter bins are misused occasionally and used for the disposal of trade and household waste. Members were informed that Officers endeavour to identify business and households from the waste and if this is possible will take relevant enforcement action.
- 1.12. Members identified early in the review that the Council did not have a prescriptive Litter Bin policy which details the aims of the policy, the types of bins available for waste including recycling, where the bins are or should be located, what the criteria and implications of issuing new bins (including within new developments) and the process for maintenance and replacement of existing bins.
- 1.13. Officers have taken this on board and have drafted operational guidance which covers the above.

### 2. Shadowing of Street Cleaning Round

2.1. Each of the Councillors on the Task Group joined the operatives for a morning on their rounds. Both urban and rural areas were covered.

- 2.2. Members of the group discussed their observations and concerns at length with Waste Officers. This included the amount of damaged bins, for example doors that would not shut leading to litter falling outside of liners. Members agreed that the poor repair of some receptacles hindered the work of the operatives and were pleased that the ongoing replacement and repair programme should ease this problem.
- 2.3. As noted above in the audit, Members identified that it was apparent that some public bins were being used for household waste.
- 2.4. Members picked up that in places there were unnecessary close location of bins, for example there are two bins in Longtown at either side of a bench.
- 2.5. Members were also concerned that street operatives were called away from their job several times to deal with tasks such as clearing fly tipping across the other side of town. Members questioned whether this should be the task of the Rapid Response Team.

### 3. Big Belly Pilot

- 3.1. Members were informed that there were solar smart bins available on the market which compressed litter, increasing the bin's effective capacity by five. Wireless technology enables units to report their status by email to the host Authority (Green less than 85% full, Orange 85% full, Red 99% Full and Bin Emptied). The bins would therefore hold much more litter and operators would not make unnecessary trips to bins which do not require emptying.
- 3.2. A month pilot was arranged and three Big Belly Solar Bins were placed in the city centre

   one at the Civic Centre, one in Scotch Street outside Mothercare and one at The
   Crescent.
- 3.3. The full trial report is attached at Appendix2. The collections summary for the period  $5^{th}$   $28^{th}$  September is as follows:

	Bin Empties at Fullness Level				Current		% Reduction
Big Belly Location	Green	Orange	Red	Total Collections	Collection System	Big Belly Collections	in Collections
The Crescent,	0	8	1	9	48	9	81.25
Civia Contro	0	4	0	0	24	4	05.92
Civic Centre	0	I	0	0	24		95.83
Market Cross,							
Mothercare	0	7	1	8	48	8	83.33

- 3.4. It is evident that less collections were needed during the pilot period with a reduction in collections between 81%-95%.
- 3.5. Feedback from the operatives was mixed however and emptying the bins was more difficult due to the weight of the compacted litter.
- 3.6. The cost to lease one of the Bins is £21 per week which calculated to £1092.00 per annum. There is also a minimum term contract of 3 years which equates to £3276.00 per solar powered bin over the lease term.

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- 3.7. It is unfortunately difficult for the Council to quantify what, if any, savings the bins would generate as emptying the public bins are only one task for the Street Operatives.
- 3.8. The City of Bath who have leased the bins for their city centre claim that they generate income through advertising and wi-fi and their waste and cleaning operations are more efficient and therefore argue that the cost for them is cost neutral.<sup>1</sup>

### 4. Advertising

- 4.1. Members of the Task Group were informed that officers within Local Environment explored the issue of advertising on waste bins (Big Belly or otherwise) and the new bins which had been ordered to replace those in a poor state of repair have A4 and A3 advertising frames.
- 4.2. However external advertising which would create income is subject to Carlisle City Council planning policy. Each bin would require a planning application and the cost to Local Environment would be in excess of £30,000 for all of the bins in the district.
- 4.3. Officers informed the Task Group that primarily bins within the City Centre would be the target for advertising and several approaches have been made to the Council by potential customers.

<sup>&</sup>lt;sup>1</sup> The West Country Tonight 25/2/2013

## Conclusions

- Unlike many other scrutiny reviews, Members have worked alongside operational officers on the project and have been able to feed into changes as they happen, much like a working group approach. Task Group Members have found this piece of work eye-opening and interesting and hope that officers have valued their input along the way.
- 2. It is time for the Members to take a step back and let the work continue and report their work to the Economy & Environment Overview and Scrutiny Panel and based on the evidence gathered throughout this work the Task Groups conclusions area as follows:
- 3. Litter bin provision is a very important Council service which has a positive effect on improving Carlisle's environment. Following a stalled audit in 2011 the 2014 exercise has identified the location of each municipal litter bin and this continues to be mapped on GIS. Officers are to provide a mechanism whereby an audit is undertaken to determine the usage of litter bins and Members urge that this is undertaken as soon as possible as this will prove invaluable evidence to maximise the effectiveness of rounds on a service under financial pressure.
- 4. Task Group Members referred to the system of numbering lighting columns which facilitates easier reporting, repair and maintenance. Existing litter bin arrangements mean that if a report is receive in respect of a bin in a particular street the location is not always clear. Members recommend then that following the completion of the GIS mapping that each litter bin is numbered.

Recommendation 1 - That following the completion of the audit of public litter bins and GIS mapping, each bin should be individually numbered with disc (similar to street lighting columns throughout the district) so that location of bins is easily identifiable.

- 5. As noted earlier in the report, the Task Group identified that the Council had no policy or guidelines for litter bins. There was no clear criteria for replacement, removal or relocation and no standardisation of the preferred type of bin. Task Group Members were pleased to note that this guidance has now been drafted and have fed their comments into the draft.
- 6. Task Group Members do question the policy of no additional bins and recommend that the guidelines include information on what service the Council will provide to new developments and employment sites.

Recommendation 2 - That the Litter Bin Guidelines which have recently been drafted include information and guidance on how the Council address the issue of what service will be provided to large new housing developments and employment sites.

7. During their time shadowing the rounds with the Street Operatives, Task Group Members noted incidents of misuse of public bins with rubbish disposed which is clearly household or trade waste. Officers provided information during this work of businesses and households that had received warning letters following evidence of disposal of household/trade waste in public bins and Task Group Members urge that this work continues and the Council uses its enforcement powers to prosecute those who continue to misuse this public service.

Recommendation 3 - That the education and enforcement undertaken by the Directorate continues and that action is taken against those members of the public and businesses who misuse public litter bins.

8. With regard to the Big Belly Solar powered bin, Task Group Members were extremely impressed with the results of the pilot which proved that the collections were greatly reduced. Task Group Members recognise that there is a cost involved but agree that there is a potential opportunity for the Council that needs further exploration. Task Group Members believe that the compactor bins in areas of high density would relieve operatives to undertake other tasks. Members ask the potential costs are considered alongside potential for income generation through advertising (see Recommendation 5).

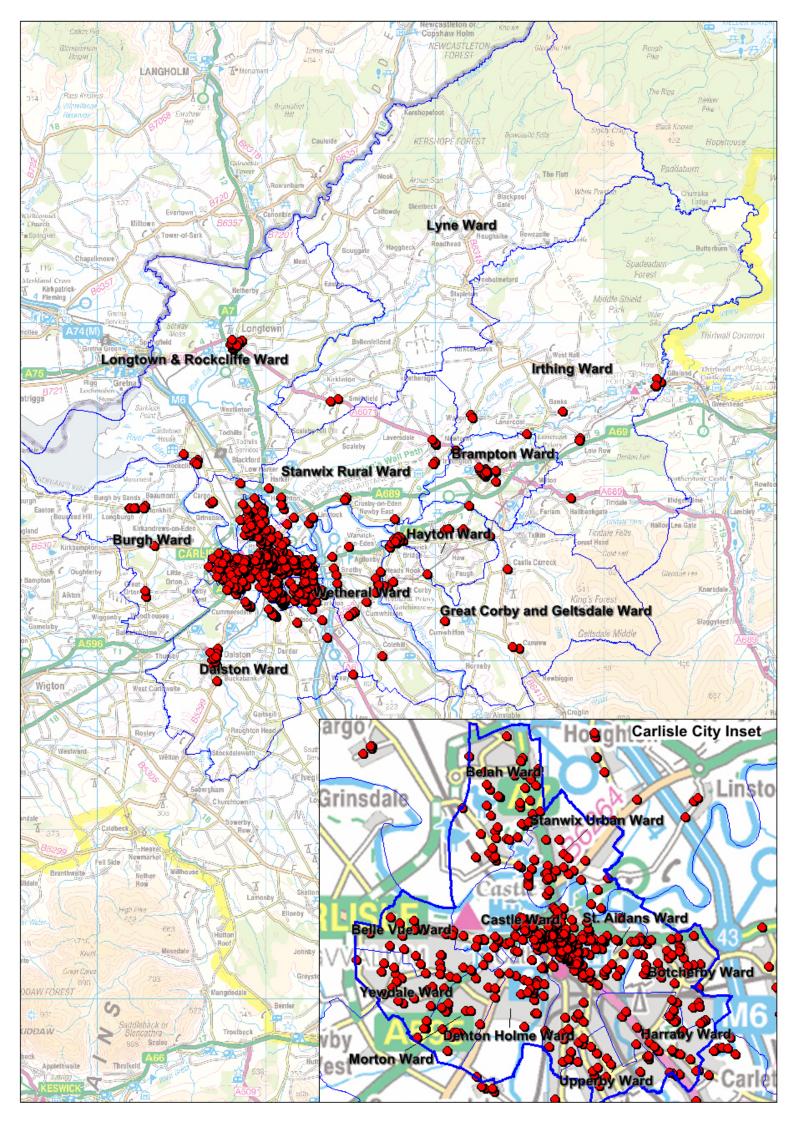
Recommendation 4 - That the use of Big Belly Solar Bins is further explored for areas of high usage.

9. Task Group Members are aware that many local authorities use their assets for advertising purposes and agree that the litter bins should also be used to raise income for the Council to regenerate back into its services. Therefore Members were disappointed to learn that the barrier to this was provided by the Council itself. Members were informed that it would cost over £30,000 to apply for the appropriate planning permission to advertise on litter bins and agreed that this needed further exploration and explanation. Therefore the Task Group will make the following recommendation.

Recommendation 5 - That income generation by advertising on litter bins should be further explored and if the barrier to maximising income is due to costs of planning applications that a full explanation is provided to Members along with potential solutions.

10. As noted earlier the success of this work between officers and Councillors has been the bringing together of local and historical knowledge of Councillors and the technical and expert knowledge of Officers. The Task Group have not hindered the ongoing work which has continued in parallel to the review and Members have been consulted and have also advised officers during this work which has been most beneficial to both parties. Task Group Members would like all Members to be involved in the ongoing work within their wards and therefore make the final recommendation.

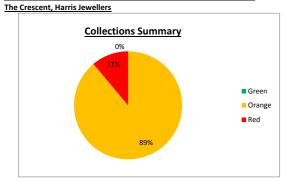
Recommendation 6 - That Ward Councillors should be sent a GIS map of the location of litter bins in their ward and are kept involved, consulted with and informed of changes.



#### Carlisle City Council Big Belly Street Compactor Bin Trial Report Data taken from the 5th September to 28th September 2014

#### **RESULT TO DATE 81% REDUCTION IN COLLECTIONS**



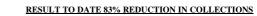


RESULT TO DATE 95% REDUCTION IN COLLECTIONS Based on previous bin collection system of 1 Bin emptied once per day Civic Centre

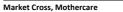


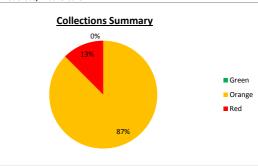
Green

Orange
Red



Based on previous bin collection system of 1 Bin emptied twice per day





Bin empties per fullness level

Green	0
Orange	8
Red	1
Total Collections	9

Current Collection system	48
Big Belly collections	9
% Reduction in collections	81.25%

Crescent, Harris Jewellers Date & Time	Event
2014-09-28 18:19:02	Green
2014-09-28 07:22:48	Green
2014-09-28 07:14:20	Bin Emptied
2014-09-27 20:16:47	85%
2014-09-27 15:09:59	Green
2014-09-27 04:10:47	Green
2014-09-26 17:13:48	Green
2014-09-26 06:15:27	Green
2014-09-25 19:19:58	Green
2014-09-25 08:23:37	Bin Emptied
2014-09-25 01:04:25	85%
2014-09-24 14:07:34	85%
2014-09-24 12:15:57	Green
2014-09-24 01:09:50	Green
2014-09-23 14:13:23	Green
2014-09-23 03:12:32	Green
2014-09-22 16:16:10	Green
2014-09-22 05:18:31	Green
2014-09-21 18:20:52	Green
2014-09-21 07:23:51	Bin Emptied
2014-09-21 05:13:31	85%
2014-09-21 03:21:38	Green
2014-09-20 16:23:50	Green
2014-09-20 05:27:46	Green
2014-09-19 18:31:07	Green
2014-09-19 07:34:23	Bin Emptied
2014-09-19 02:37:50	85%
2014-09-18 23:12:41	Green
2014-09-18 12:15:52	Green
2014-09-18 00:41:49	Green

#### Bin empties per fullness level

100%

Green	0
Orange	1
Red	0
Total Collections	1

Current Collection system	24
Big Belly collections	1
% Reduction in collections	95.83%

Date & Time	Event
2014-09-28 13:05:17	Green
2014-09-28 01:44:51	Green
2014-09-27 14:24:18	Green
2014-09-27 02:52:29	Green
2014-09-26 15:31:36	Green
2014-09-26 04:00:08	Green
2014-09-25 16:39:45	Green
2014-09-25 05:17:28	Green
2014-09-24 17:55:44	Green
2014-09-24 06:34:30	Green
2014-09-23 19:12:36	Green
2014-09-23 07:51:05	Green
2014-09-22 20:28:16	Green
2014-09-22 09:07:48	Green
2014-09-21 21:44:35	Green
2014-09-21 10:23:52	Green
2014-09-20 23:01:19	Green
2014-09-20 11:40:57	Green
2014-09-20 00:16:39	Green
2014-09-19 12:56:36	Green
2014-09-19 01:33:21	Green
2014-09-18 14:13:14	Green
2014-09-18 02:40:57	Green
2014-09-17 15:20:36	Bin Emptied
2014-09-17 14:01:50	85%
2014-09-17 06:43:59	Green
2014-09-16 19:21:55	Green
2014-09-16 08:00:51	Green
2014-09-15 20:39:24	Green
2014-09-15 09:18:46	Green

Current Collection system	48
Big Belly collections	8
% Reduction in collections	83.33%

Bin empties per fullness level

0

7

1

8

Green

Orange

Total Collections

Red

Date & Time	Event
2014-09-28 16:05:29	85%
2014-09-28 09:04:20	Green
2014-09-27 22:22:42	Green
2014-09-27 11:41:42	Green
2014-09-27 00:56:59	Green
2014-09-26 14:16:12	Bin Emptied
2014-09-26 13:51:19	85%
2014-09-26 05:57:31	Green
2014-09-25 19:17:03	Green
2014-09-25 08:35:52	Green
2014-09-24 21:54:21	Green
2014-09-24 11:13:25	Green
2014-09-24 00:13:27	Green
2014-09-23 13:33:34	Green
2014-09-23 12:55:02	Bin Emptied
2014-09-23 12:38:21	85%
2014-09-23 07:28:55	Green
2014-09-23 07:28:55	Green
2014-09-22 20:47:20	Green
2014-09-22 20:47:20	Green
2014-09-22 20:47:20 2014-09-22 10:05:26	Green Green
2014-09-22 20:47:20 2014-09-22 10:05:26 2014-09-21 23:22:32	Green Green Green
2014-09-22         20:47:20           2014-09-22         10:05:26           2014-09-21         23:22:32           2014-09-21         12:40:49	Green Green Green Green
2014-09-22         20:47:20           2014-09-22         10:05:26           2014-09-21         23:22:32           2014-09-21         12:40:49           2014-09-21         12:59:38	Green Green Green Green Green
2014-09-22         20:47:20           2014-09-22         10:05:26           2014-09-21         23:22:32           2014-09-21         12:40:49           2014-09-21         12:59:38           2014-09-20         15:19:36	Green Green Green Green Green Door Open
2014-09-22         20:47:20           2014-09-22         10:05:26           2014-09-21         23:22:32           2014-09-21         12:40:49           2014-09-21         12:59:38           2014-09-20         15:19:36           2014-09-20         10:41:03	Green Green Green Green Door Open Green
2014-09-22         20:47:20           2014-09-22         10:05:26           2014-09-21         22:32           2014-09-21         12:40:49           2014-09-21         12:40:49           2014-09-21         01:59:38           2014-09-20         15:19:36           2014-09-20         10:41:03           2014-09-20         10:41:03           2014-09-20         00:00:15	Green Green Green Green <b>Door Open</b> Green Green
2014-09-22         20:47:20           2014-09-22         10:05:26           2014-09-21         23:22:32           2014-09-21         12:40:49           2014-09-21         11:59:38           2014-09-20         15:19:36           2014-09-20         10:41:03           2014-09-20         10:41:03           2014-09-20         10:41:03           2014-09-20         10:41:03           2014-09-20         10:41:03           2014-09-20         11:48	Green Green Green Green <b>Door Open</b> Green Green Bin Emptied
2014-09-22         20:47:20           2014-09-22         10:05:26           2014-09-21         23:22:32           2014-09-21         12:40:49           2014-09-21         01:59:38           2014-09-20         15:19:36           2014-09-20         15:19:36           2014-09-20         10:41:03           2014-09-20         00:015           2014-09-20         00:15           2014-09-19         13:19:48           2014-09-19         12:54:51	Green Green Green Green Green Green Green Bin Emptied 99%

2014-09-17 13:44:42	Green
2014-09-17 02:37:13	Green
2014-09-16 15:39:03	Green
2014-09-16 04:39:22	Green
2014-09-15 17:43:17	Green
2014-09-15 06:45:28	Bin Emptied
2014-09-15 06:20:42	85%
2014-09-14 19:23:24	85%
2014-09-14 15:09:43	Green
2014-09-14 04:12:06	Green
2014-09-13 17:14:54	Green
2014-09-13 06:14:46	Green
2014-09-12 19:17:22	Green
2014-09-12 08:19:55	Bin Emptied
2014-09-12 03:16:54	99%
2014-09-11 21:19:22	Green
2014-09-11 10:22:27	Green
2014-09-10 23:23:40	Door Open
2014-09-10 19:53:09	Green
2014-09-10 08:55:37	Bin Emptied
2014-09-10 04:08:39	85%
2014-09-10 01:06:20	Green
2014-09-09 14:06:55	Green
2014-09-09 02:59:18	Green
2014-09-08 16:02:34	Green
2014-09-08 05:00:25	Green
2014-09-07 18:02:28	Green
2014-09-07 07:04:58	Bin Emptied
2014-09-07 05:58:39	85%
2014-09-07 04:40:15	Green
2014-09-06 17:41:12	Green
2014-09-06 06:43:39	Bin Emptied
2014-09-06 04:00:51	85%
2014-09-05 18:03:53	Green
2014-09-05 07:06:45	INSTALL

2014-09-14 21:56:03	Green
2014-09-14 10:35:03	Green
2014-09-13 23:12:35	Green
2014-09-13 11:52:24	Green
2014-09-13 00:27:38	Green
2014-09-12 13:06:40	Green
2014-09-12 01:43:33	Green
2014-09-11 14:22:12	Green
2014-09-11 02:59:20	Green
2014-09-10 15:38:07	Green
2014-09-10 15:03:21	Green
2014-09-10 14:54:19	Green
2014-09-10 03:28:09	Green
2014-09-09 16:06:14	Green
2014-09-09 04:41:26	Green
2014-09-08 17:19:19	Green
2014-09-08 05:56:39	Green
2014-09-07 18:33:43	Green
2014-09-07 07:11:32	Green
2014-09-06 19:49:07	Green
2014-09-06 08:28:04	Green
2014-09-05 21:07:14	Green
2014-09-05 09:46:07	INSTALL

2014-09-17 19:50:32	Green
2014-09-17 09:09:09	Door Open
2014-09-17 02:01:14	Green
2014-09-16 15:19:45	Green
2014-09-16 04:28:39	Green
2014-09-15 17:47:34	Green
2014-09-15 07:06:11	Bin Emptied
2014-09-15 01:09:32	85%
2014-09-14 14:28:15	85%
2014-09-14 09:50:01	Green
2014-09-13 23:08:03	Green
2014-09-13 12:25:53	Green
2014-09-13 01:42:20	Green
2014-09-12 15:00:57	Bin Emptied
2014-09-12 14:23:05	85%
2014-09-12 08:03:37	Green
2014-09-11 21:21:30	Green
2014-09-11 10:38:54	Green
2014-09-10 23:56:09	Green
2014-09-10 13:13:47	Bin Emptied
2014-09-10 12:43:21	85%
2014-09-10 05:35:14	Green
2014-09-09 18:53:53	Green
2014-09-09 08:11:42	Green
2014-09-08 21:29:46	Green
2014-09-08 10:47:57	Green
2014-09-08 10:39:36	Bin Emptied
2014-09-08 09:30:19	85%
2014-09-08 03:17:13	Green
2014-09-07 16:35:17	Green
2014-09-07 05:52:36	Green
2014-09-06 19:10:15	Green
2014-09-06 08:27:04	Bin Emptied
2014-09-05 23:37:59	85%
2014-09-05 18:00:57	Green
2014-09-05 07:18:13	INSTALL