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## Report on the Landfill Allowances Scheme (LAS) Wales 2008/9

September 2009

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## **Executive Summary**

This report covers the fourth full year of the Landfill Allowances Scheme in Wales, and covers the period 1<sup>st</sup> April 2008 to 31<sup>st</sup> March 2009. The purpose of the scheme is to ensure diversion of biodegradable municipal waste (BMW) from landfill. This is done by setting limits on the amount of BMW waste that Local Authorities in Wales can landfill to meet the targets as set out under Article 5 of the EU Landfill Directive.

### **Compliance headlines**

Wales has reduced the amount of BMW sent to landfill by 30% over the last three years. Overall this represents a huge step forward which is further aided by the fact that all Local Authorities in Wales are now within their 2009/10 LAS allowances one year early.

Overall, Welsh Local Authorities sent 599,703<sup>1</sup> tonnes of BMW to landfill compared to the 2008/9 Wales allowance of 788,000 tonnes, this is 24% less than the allowance. As it stands, Wales is already 16% below the first Landfill Directive target for 2010. This clearly demonstrates that the Local Authorities actions to reduce the amount of biodegradable waste sent to landfill are succeeding. Reducing the amount of waste going to landfill also helps to cut greenhouse gas emissions (methane from the breakdown of BMW in a landfill can be up to 25 times worse than carbon dioxide).

Looking at individual Local Authority performance it can be seen that Neath Port Talbot, Isle of Anglesey and Conwy used the least amount of their allowances (ranging from 50 – 66%). This means these Local Authorities are well on target. This contrasts with Powys, Ceredigion and Gwynedd which used the most (ranging from 89 to 90%).

### **Future pressures**

For the period 2004/5 to 2009/10 Welsh Assembly Government allocated allowances for each Local Authority in Wales based on the amount of waste landfilled in 2001/2. Moving forward for 2010/11 to 2019/20, Welsh Assembly Government has communicated to all Local Authorities in Wales that allowances for this period will be calculated using proportions of municipal waste arisings for 2007/8 for each Local Authority.

The waste management strategies adopted by Local Authorities over the last four years have put Wales in a good position to meet the first Landfill Directive target in 2010. However, Local Authorities in Wales will need to step up the diversion of BMW from landfill for them all to achieve their allowance allocations for 2013 and 2020. It is essential that current progress is maintained and continually improved in future years to meet these challenging targets.

### **Improvements to WasteDataFlow**

During 2008/9, Local Authorities and Landfill Operators showed a continued good level of prompt reporting to the LAS Scheme. There have been continued improvements to WasteDataFlow and Environment Agency Wales has issued guidance to improve the consistency and accuracy of data reported under the LAS Scheme. These have included the ability to include figures of recyclate from residual waste, a new improved material list within WasteDataFlow, and guidance has been issued on reporting of final destinations of waste. A review of reject rates data from Material Recovery Facilities in WasteDataFlow has also been undertaken.

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<sup>1</sup> Out of a total of 1,724,371 tonnes of municipal solid waste arising by Welsh Local Authorities

## List of Acronyms

<b>BMW</b>	Biodegradable Municipal Waste
<b>CIWM</b>	Chartered Institution of Wastes Management
<b>Defra</b>	Department for Environment, Food and Rural Affairs
<b>EAW</b>	Environment Agency Wales
<b>EU</b>	European Union
<b>EWG</b>	European Waste Catalogue
<b>LAS</b>	Landfill Allowances Scheme
<b>LAs</b>	Local Authorities
<b>LATS</b>	Landfill Allowances and Trading Scheme
<b>MBT</b>	Mechanical-Biological Treatment
<b>MREC</b>	Material Recovery & Energy Centre
<b>MRFs</b>	Material Recovery Facilities
<b>MSW</b>	Municipal Solid Waste
<b>RATS</b>	Regis Attached Tonnage System
<b>WLGA</b>	Welsh Local Government Association
<b>WDA</b>	Waste Disposal Authority
<b>WDF</b>	WasteDataFlow
<b>WEEE</b>	Waste Electrical and Electronic Equipment

## 1. Introducing LAS

The Landfill Allowances Scheme (LAS) Wales was established through the Landfill Allowances Scheme (Wales) Regulations 2004<sup>2</sup>. The purpose of the scheme is to ensure diversion of biodegradable municipal waste (BMW) from landfill. This is done by setting limits on the amount of BMW waste that Local Authorities (LAs) in Wales can landfill.

The LAS Regulations implement the Waste and Emissions Trading Act 2003 and the Landfill (Scheme Year and Maximum Landfill Amount) Regulations 2004. The Regulations establish the Environment Agency as the Monitoring Authority for England and Wales. The Act and Regulations implement Article 5 of the Landfill Directive to achieve:

- A reduction by 2010 of the amount of BMW going to landfill to 75% of that produced in 1995;
- by 2013 to 50% of the 1995 figure;
- by 2020 to 35% of the 1995 figure.

The overall aim of the Landfill Directive is to reduce the pollution potential from landfilled waste as this can impact on surface water, groundwater, soil, air, and also contribute to climate change.

The UK is required to achieve three Landfill Directive targets (see Table 1).

**Table 1. Landfill Directive targets for the UK**

Country	Maximum amount (tonnes) in target year ending in:		
	2010	2013	2020
<b>UK</b>	13,700,000	9,130,000	6,390,000
<b>England</b>	11,200,000	7,460,000	5,220,000
<b>Scotland</b>	1,320,000	880,000	620,000
<b>Wales</b>	710,000	470,000	330,000
<b>Northern Ireland</b>	470,000	320,000	220,000

To achieve the Landfill Directive targets it will be necessary to:

- increase the diversion of BMW from landfill;
- reduce the amount of municipal waste generated; or
- adopt a combination of both these options.

Under the LAS all LAs in Wales have been set statutory targets to limit the amount of BMW they send to landfill. Until this year allowances were only firmly allocated up until the 2009-10 target year with indicative allowances signalled post 2009-10.

On 10 March 2009 a decision to calculate allowances from 2010-11 to 2019-20 using the proportions of municipal waste arisings for each LA in 2007-08 was communicated to all LAs.

There is no trading of allowances between LAs in Wales because the Welsh Assembly Government want each LA to play their part and invest in BMW diversion from the outset.

<sup>2</sup> LAS Regulations <http://www.opsi.gov.uk/legislation/wales/wsi2004/20041490e.htm>

## 2. Reporting

Reporting deadlines for LAs and Landfill Operators (see Table 2) are set out in the LAS Regulations. Both LAs and Landfill Operators have to submit municipal waste returns to the Environment Agency Wales (EAW)<sup>3</sup> within one month of the end of that period.

**Table 2. Statutory LAS reporting deadlines**

Quarter	Period	Reporting deadlines
1	Data from 1 April – 30 June	31 July
2	Data From 1 July – 30 September	31 October
3	Data from 1 October – 31 December	31 January
4	Data from 1 January – 31 March	30 April

In 2008/9, EAW also produced the ‘LAS Guidance on reporting and notices’<sup>4</sup> which sets out the more detailed timetable for LAs and Landfill Operators to meet their obligation to provide timely and accurate data under the LAS Regulations.

### 2.1 Local Authorities

LAs in Wales must report municipal waste data each quarter within one month of the quarter end. WasteDataFlow (WDF) was launched in April 2004 to serve this purpose. WDF is a web-based system initially developed by the Chartered Institution of Wastes Management (CIWM). It is now owned and operated by Department of Environment, Food and Rural Affairs (Defra) and the devolved administrations.

Senior managers in each LA check and authorise data as part of their internal quality control processes before it is sent to EAW via WDF. We rely on the receipt of timely and accurate data each quarter in order to provide the LAs with their compliance results against their allowance allocations.

Figure 1 shows that the level of compliant reporting by LAs in Wales in 2008/9 has overall improved again compared to previous years. 12 LAs consistently reported on time throughout 2008/9 (an increase of 3 from 2007/8). This year there was also only one instance of a LA reporting data over 7 days late in the whole year which is an improvement on 2007/8. Although there was a slight drop in Quarters 2 and 3 on the number of LAs reporting on time, the overall picture is one of improvement. EAW reported to the Welsh Assembly Government which LAs did not submit data on time. See Annex 1 for more information on LA reporting.

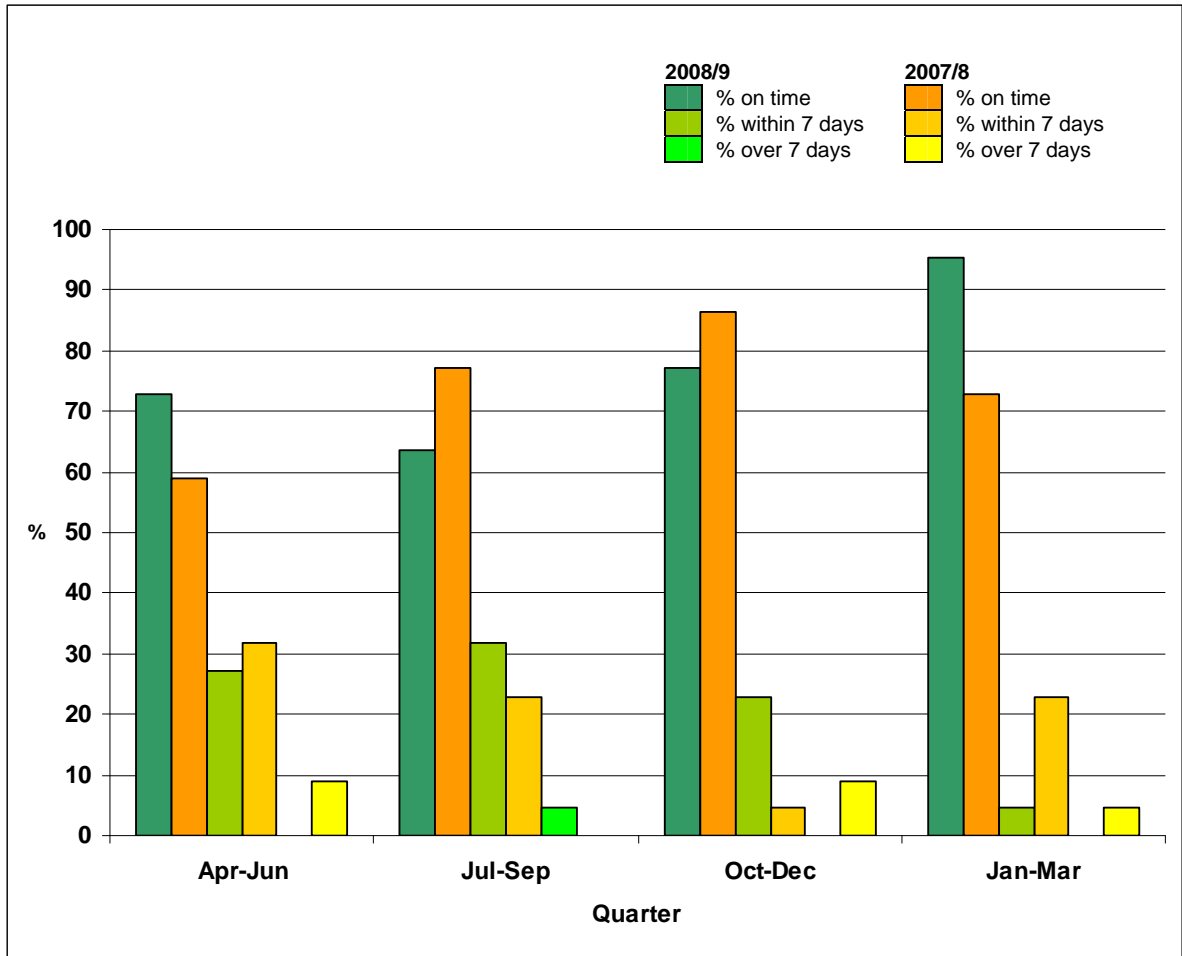
The main reasons for LAs reporting after the deadline included:

- Staffing resources and training issues at LAs
- Technical issues with WDF affecting LAs entering data
- Delay in receiving data from contractors affecting LA input of data into WDF
- Introduction of new collection rounds affecting data to be entered
- IT problems at LAs affecting data input

<sup>3</sup> Under the LAS Regulation, the ‘Environment Agency’ is listed as the Monitoring Authority, however, in Wales it is administered by Environment Agency Wales.

<sup>4</sup> [http://www.wastedataflow.org/documents/WalesWMT/LAS\\_Reporting\\_protocol\\_May\\_2008.pdf](http://www.wastedataflow.org/documents/WalesWMT/LAS_Reporting_protocol_May_2008.pdf)

**Figure 1. Percentage of LAs reporting promptly in 2008/9 compared to 2007/8**

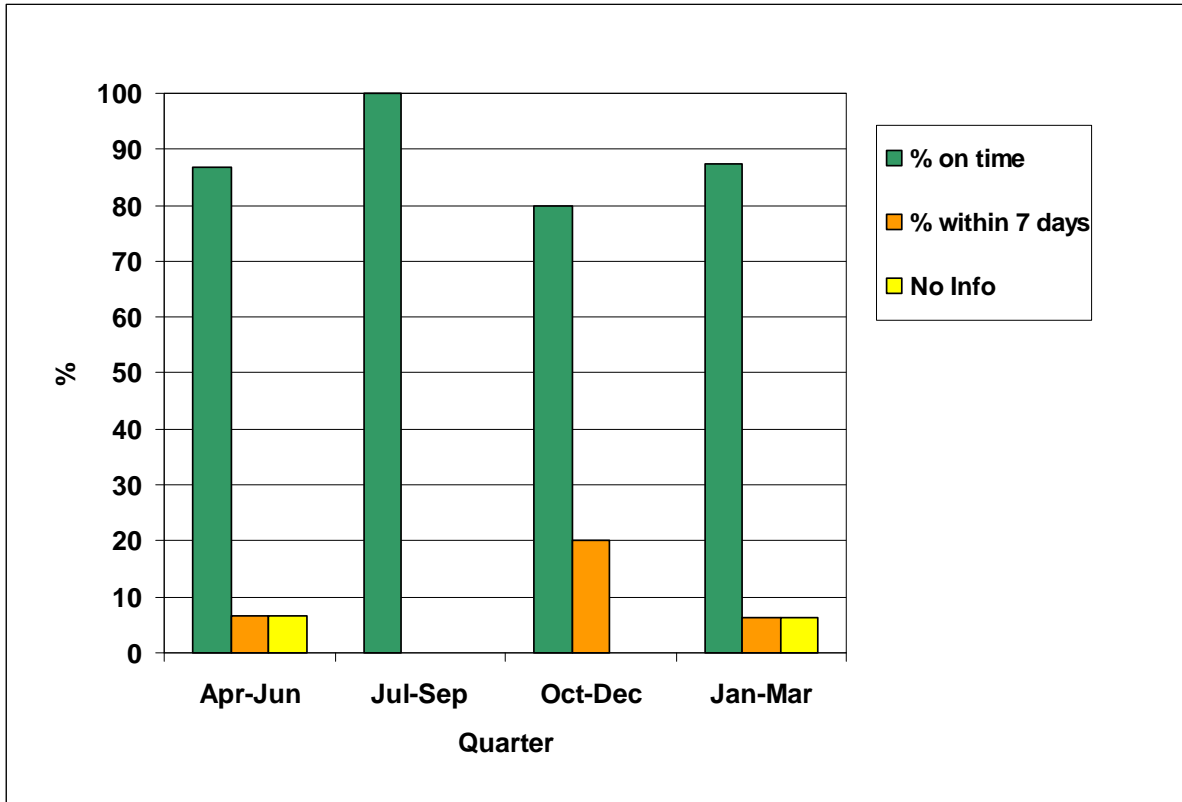


## 2.2 Landfill Operators

Each quarter Landfill Operators are required to report the amount of municipal waste received by their sites within one month after quarter end. In 2008/9, 17 landfill sites received municipal waste originating in Wales. These included 14 landfills located in Wales and 3 landfills located in England (Derbyshire, Shropshire and Wiltshire). These are listed in Annex 4 within the LA data summaries.

Figure 2 shows the level of compliant reporting by Landfill Operators in Wales in 2008/9. It shows that at least 80% of landfill operators reported their site returns on time. Only a few landfills reported late; these were all within 7 days. There were also a small number of instances where we have no date information recorded about Landfill Operator compliance. From autumn 2009, we intend to use a new web based system called Generic Operator Returns (GOR) to collect waste information directly from Operators. This is part of a general improvement in the way EAW gather waste data allowing much quicker access to data reported from permitted facilities.

**Figure 2. Percentage of Waste Sites reporting promptly in 2008/9**



### 3. Auditing - Monitoring Authority

The LAS year runs from April 1<sup>st</sup> to March 31<sup>st</sup>. In Wales, the audit process is completed by EAW. The audit process starts once the data from LAs is submitted to WDF and site returns are submitted from landfill operators. This is required one month after each quarter end. EAW has six weeks to complete the data validation process, consult with LAs and Welsh Local Government Association (WLGA) before the final roll up of data to Welsh Assembly Government (Level 35).

An EAW Officer meets with representatives from equivalent LAS/LATS schemes in England, Scotland & Northern Ireland. These meetings ensure there is an opportunity to discuss and resolve common issues experienced by government agencies, share of best practice and enable consistency to be achieved.

#### 3.1 Stage 1 (WDF validation)

A quarterly desktop audit process begins once data from the LAs is submitted to Level 30 in WDF. EAW monitors the process and uses the data to generate the LAS Quarterly Reports. EAW completes data checks to identify any missing or are unusual returns. We then discuss and agree any changes with the LAs.

There are also regular meetings held with representatives from the LAs to discuss inputting data issues with WDF.

## **Material Recovery Facilities**

In 2008/9 EAW undertook a review of the Material Recovery Facility (MRF) data reported by LAs in WDF. It is likely that a MRF will produce an amount of waste that is rejected. This reject may go to landfill or for incineration. As landfill tonnages from MRFs are used in the calculation of BMW landfilled it is important that this is reported accurately.

During 2008/9 a total of 13 LAs in Wales reported some of their waste as going to one or more non-residual waste (Clean) MRFs. In total 23 MRFs were used by Welsh LAs.

Work focussed particularly on reviewing data from LAs that reported a zero reject rate from any of the MRFs they used during the year.

## **Final Destinations**

During 2008/9 we looked to improve the destination data reported by LAs. In particular we focused on where a LA had used 'other/exempt' as a destination.

If a LA had used 'other/exempt' as a destination and not provided details of the destination in the comments box we asked that they begin to provide this data. If a LA had provided these details in the comments box and the destination was held in WDF's master list, we asked that they add the destination to their selection list and use in future returns. Where details were provided but the destination is not held in WDF's master list we are investigating suitable ways of adding these to the system.

### **3.2 Stage 2 (validation of WDF data using landfill site returns)**

EAW collects site returns data from permitted waste facilities and enters them into the Regis Attached Tonnage System (RATS) every quarter. The LAS Regulations also require all Landfill Operators disposing of municipal waste to submit quarterly returns to the EAW. When the landfill site returns data is received it is checked for obvious anomalies, in line with agreed EAW guidance and procedures, and any changes are agreed with landfill operators.

The data is used as part of the LAS validation process to compare the total municipal waste landfilled figures reported by the Landfill Operators with the tonnages reported by LAs in WDF. A quarterly discrepancy report is produced and EAW investigates any differences in data between the LAs and Landfill Operators. Welsh Assembly Government has requested that investigations are undertaken for discrepancies over 10%.

EAW assists with waste classification, under the European Waste Catalogue (EWC) coding and provides clarification on the definition of municipal waste. Data is amended where required. WDF figures are used where there are still issues with data.

Table 3 shows the figures for the amount of municipal waste landfilled, reported by the LAs via WDF and from the landfill operators using site returns. The results show the original and final discrepancy percentages between the two datasets before and after the validation.

Landfill operators reported that a total of 1,029,386 tonnes of municipal waste was landfilled by LAs. This data is used as part of our validation process to compare with the municipal waste sent to landfill reported by LAs in WDF. LAs reported 1,024,153 tonnes of MSW landfilled during 2008/9. This means there is a 0.5% discrepancy between the figures which is well within the 10% discrepancy target set by the Welsh Assembly Government.

The discrepancy figures between the two datasets was reduced from 7.9% to 0.5% following validation, which is a reduction from 80,037 tonnes to 5,233 tonnes discrepancy between the two datasets. This overall discrepancy figure is similar to the final discrepancy percentage obtained for 2007/8 of 0.4%.

**Table 3. Comparison of WDF and Landfill site returns data showing amount of municipal waste sent to landfill in Wales in 2008/9 and discrepancies between the two data sets before and after validation**

Quarter	2008/9 Site Returns – MSW sent to landfill (tonnes)		2008/9 WDF – MSW sent to landfill (tonnes)*		2008/9 % Discrepancy between the two data sets	
	Original	Final	Original	Final	Original	Final
Quarter 1	294,841	276,261	267,439	277,757	12.6	-0.5
Quarter 2	288,907	266,652	265,905	265,059	9.3	0.6
Quarter 3	256,780	243,428	243,022	242,361	6.1	0.4
Quarter 4	252,532	243,046	236,657	238,976	6.0	1.7
<b>Total</b>	<b>1,093,060</b>	<b>1,029,386</b>	<b>1,013,023</b>	<b>1,024,153</b>	<b>7.9</b>	<b>0.5</b>

\* WDF – This is not the total amount of MSW sent to landfill reported in WDF but is the landfill tonnages that are checked against site returns

The LA discrepancy figures are detailed in Annex 4 including the original discrepancy and the post validation figures. After undertaking 88 checks for the LAs, only 3 remained over 10% discrepancy. These were for Swansea, Monmouthshire and Torfaen. There are a variety of reasons which cause discrepancies between the two datasets. These include:

- Double counting and errors in the data inputted into WDF by LAs.
- Landfills report site returns under List of Wastes<sup>5</sup> (EWC), whilst LAs report by material type in WDF. These different reporting systems cause issues when comparing and also when distinguishing municipal waste as defined under LAS Regulations.
- Private contractors may take municipal waste to landfill in the same vehicles they use to collect non-municipal waste. It is therefore difficult to accurately calculate the amount of municipal waste received at the landfill site.
- Issues with apportioning municipal waste from a landfill site that is used by several Local Authorities.
- Stockpiling of waste at transfer stations prior to being sent to landfill

### 3.3 Local Authority visits

In addition to the normal validation work completed by EAW, more in-depth visits are also undertaken with the LAs and Landfill Operators. Visits to landfills take place in order to resolve any issues with the site returns submitted.

EAW visited all 22 LAs in 2008 to look at the quality and consistency of municipal waste data submitted into WDF. During the visits EAW examined the LAs' systems and processes and in particular looked at municipal waste classification, final destinations of waste, reject rates, material recovery facilities and WDF data reporting.

The visits enabled us to compare processes and systems across LAs and also identify good practice. Each LA has been provided with a report of their visit and includes recommendations on improvements that can be made in the areas of data collection, quality assurance, data reporting and partnership working. All 22 LAs demonstrated in the visits that they have been working hard to have adequate processes and systems in place.

<sup>5</sup> <http://www.england-legislation.hms.gov.uk/legislation/wales/wsi2005/20051820e.htm>

A number of LAs had good processes and systems, with examples of good practice identified such as good succession planning, accurate data collection and minimising errors and also validation of data provided by contractors. There were also good practice demonstrated with apportionment of wastes between LAs and checks on final destinations and on the legality of waste sites used.

The common issues identified to be improved include:

- gaps in data on reporting the final UK destination of municipal waste and rejected municipal waste from recovery facilities;
- limited information held by some LAs on legal status of the facilities accepting LAs municipal waste;
- lack of quality assurance procedures on data received from contractors;
- informal agreements, rather than contracts in place for some of the waste streams not dealt with by the main contractor making it difficult to gather data to meet reporting deadlines;
- data discrepancies were found in relation to other reporting systems such as Flycapture, Waste Electrical and Electronic Equipment (WEEE) reporting, etc;
- some LAs had limited information on how average weights and apportionments of waste had been calculated;
- too much reliance on one or two key members of staff in the LA to report accurate and timely data to EAW;
- few written procedures and contingency plans on the collection, quality assurance of contractors' data and reporting figures into WDF;
- data reporting problems when the structure of WDF questions or guidance is changed, particularly in the case of complex waste collection or disposal systems;
- some LAs had some recycling contractual arrangements that made it difficult to gather data to meet WDF quarterly deadlines.

The audit reports are due be published on our website in autumn 2009 following Welsh translation. We will also identify whether any further areas require further guidance to be provided and promotion of good practice.

## **4. Annual Reconciliation**

We have a duty under the LAS Regulations to report performance against the LAs' annual allowance allocations and to report the total for Wales. We are responsible for reconciling the allowances available to each LA with the amount of BMW they have sent to landfill. We calculate the amount of BMW sent to landfill using a mass balance approach. Annex 2 explains how we make this calculation and also the current position with monitoring plans in relation to pre-treatment of municipal waste before being landfilled.

We must determine within 5 months of the end of the scheme year, for each LA, the amount of BMW sent to landfills. We provide the Welsh Assembly Government with this equivalent annual monitoring report on 1<sup>st</sup> September each year. The WLGA and LAs are consulted and the final report is published on our LAS website, which acts as the Landfill Allowances register.

Any LA exceeding its allowance allocation will be reported to Welsh Assembly Government and could face financial penalties.

## **5. Local Authority Compliance**

The overall results from the 2008/9 monitoring year are shown in Table 4 and Figure 3. Annex 4 includes individual summary results for each LA. The results show that all the LAs achieved their allowance obligations during 2008/9. A total of 599,703 tonnes of BMW from Wales was sent to landfill compared to the total allowance of 788,000 tonnes. This means LAs in Wales together landfilled 24% less BMW than the allowance they were allocated.

The results show that six LAs have the greatest headroom to meet their future obligations by using no more than 70% of their allowances. Neath Port Talbot used only 50%, with both Isle of Anglesey and Conwy using 66% of their allowance. Swansea, Bridgend and Monmouthshire respectively used 68%, 69% and 70% their allowances.

The three LAs with least headroom to meet future obligations are Powys which used 89% and Ceredigion and Gwynedd which both used 90% of their allowances.

**Table 4. Results from the 2008/9 monitoring year**

Local Authority	Total MSWt Arising (tonnes)	Total BMW Arising (tonnes) <sup>6</sup>	Total BMW Landfilled (tonnes)	Total BMW Diverted by recycling, composting and reuse (tonnes) <sup>6</sup>	2008/9 LAS Allowance (tonnes)	% of LAS Allowance used
Blaenau Gwent	35,855	21,872	16,531	5,341	22,831	72.4
Bridgend	85,916	52,409	20,640	21,947	30,007	68.8
Caerphilly	106,956	65,243	42,600	22,643	50,760	83.9
Cardiff	180,798	110,287	63,495	46,691	80,424	79.0
Carmarthenshire	84,164	51,340	29,625	21,203	40,398	73.3
Ceredigion	43,065	26,270	13,571	10,177	15,145	89.6
Conwy	77,244	47,119	24,483	22,595	36,942	66.3
Denbighshire	48,754	29,740	19,034	10,190	21,884	87.0
Flintshire	87,893	53,615	31,332	22,144	40,367	77.6
Gwynedd	79,853	48,711	28,920	19,728	32,229	89.7
Isle of Anglesey	44,536	27,167	12,865	13,995	19,563	65.8
Merthyr Tydfil	33,795	20,615	13,237	7,433	16,672	79.4
Monmouthshire	49,065	29,930	15,806	14,118	22,631	69.8
Neath Port Talbot	87,363	53,291	23,149	15,418	45,908	50.4
Newport	70,918	43,260	25,951	17,307	33,972	76.4
Pembrokeshire	70,914	43,258	27,030	16,227	31,879	84.8
Powys	82,410	50,270	25,886	24,378	29,007	89.2
Rhondda Cynon Taff	120,298	73,382	43,898	27,650	53,145	82.6
Swansea	130,422	79,558	49,762	29,659	73,243	67.9
Torfaen	55,739	34,001	18,928	14,650	26,015	72.8
Vale of Glamorgan	66,202	40,383	23,485	16,906	27,931	84.1
Wrexham	82,211	50,149	29,475	20,630	37,047	79.6
<b>Wales Total</b>	<b>1,724,371</b>	<b>1,051,870</b>	<b>599,703</b>	<b>421,030</b>	<b>788,000</b>	<b>76.1</b>

<sup>6</sup> BMW Arising does not equal the sum of BMW landfilled and BMW Diverted, for two reasons:

- i) BMW Diverted is based on the tonnages of biodegradable waste diverted for recycling, reuse and composting. However, biodegradable waste may also be diverted in other ways, e.g. through further treatment of residual waste such as MBT plants or non-landfill disposal such as incineration and these tonnages are not shown in this table.
- ii) Total BMW Arising is based on arisings of waste and BMW Diverted is based on the destination of waste, therefore there may be differences due to stockpiling, which may overlap the reporting years.

EAW checks for discrepancies that may occur due to other types of diversion and stockpiling to ensure they are within expected levels, and requests explanations from individual LAs and sites where necessary to ensure the data is accurate and differences are satisfactorily accounted for.

Figure 3. Amount of BMW landfilled compared to landfill allowance for Local Authorities in Wales 2008/9

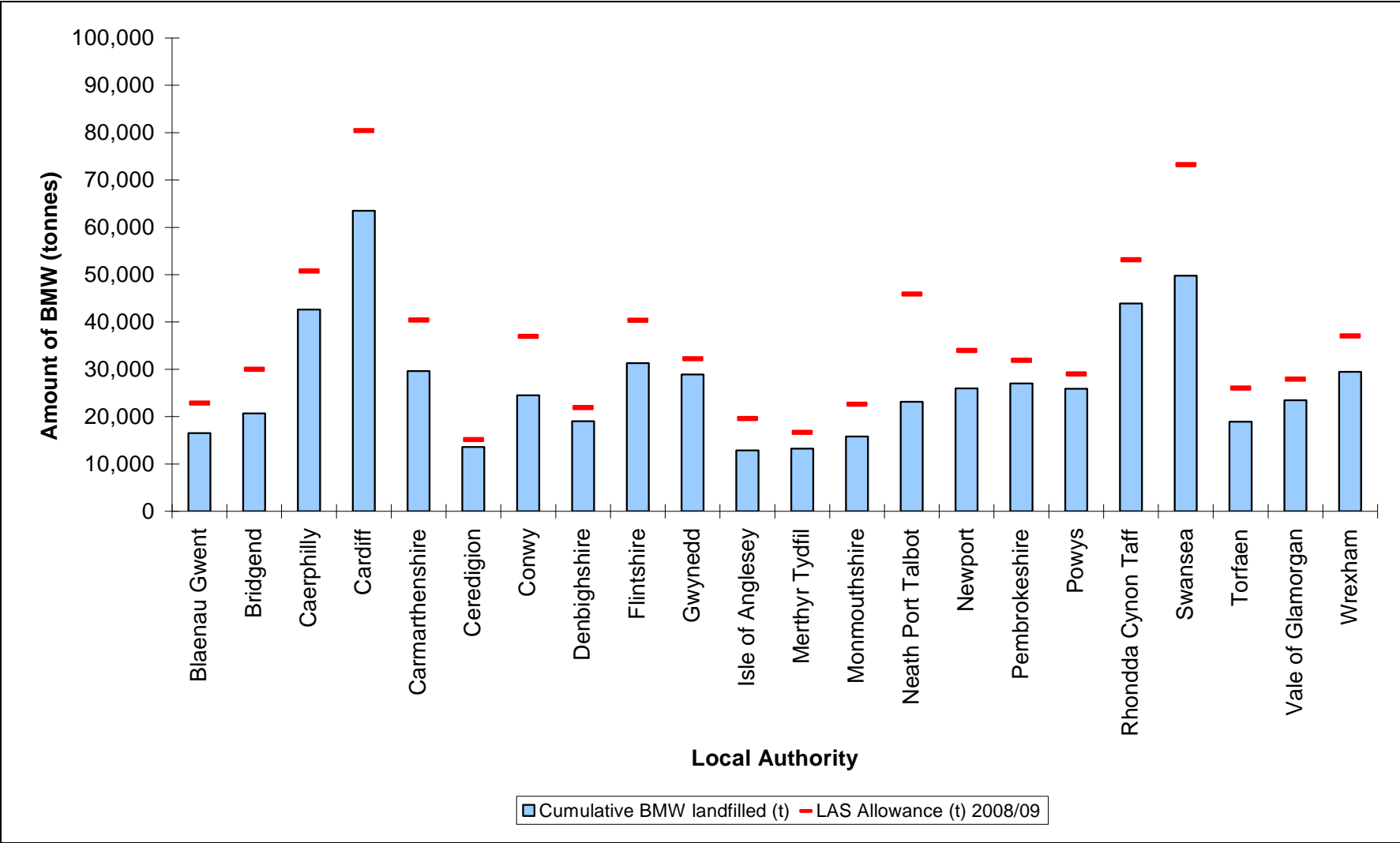


Table 5 shows the ten LAs generating the most municipal waste in Wales and compares the amount of their allowances they have used. In total these LAs account for 60% of the BMW landfilled in Wales. Three of the LAs used no more than 70% of their allowance, namely Neath Port Talbot, Swansea and Bridgend; Powys used the highest proportion of its allowance (89%). Overall, this group of LAs used slightly less of their combined allowance, 75% compared to all LAs in Wales at 76%.

**Table 5. Amount of BMW landfilled compared to landfill allowances for the LAs with the ten largest municipal waste arisings in Wales**

Local Authority	Total MSWt Arising (tonnes)	Total BMW Arising (tonnes)	Total BMW Landfilled (tonnes)	Total BMW Diverted by recycling, composting and reuse (tonnes) <sup>6</sup>	2008/9 LAS Allowance (tonnes)	% of LAS Allowance used
Cardiff	180,798	110,287	63,495	46,691	80,424	79.0
Swansea	130,422	79,558	49,762	29,659	73,243	67.9
Rhondda Cynon Taff	120,298	73,382	43,898	27,650	53,145	82.6
Caerphilly	106,956	65,243	42,600	22,643	50,760	83.9
Flintshire	87,893	53,615	31,332	22,144	40,367	77.6
Neath Port Talbot	87,363	53,291	23,149	15,418	45,908	50.4
Bridgend	85,916	52,409	20,640	21,947	30,007	68.8
Carmarthenshire	84,164	51,340	29,625	21,203	40,398	73.3
Powys	82,410	50,270	25,886	24,378	29,007	89.2
Wrexham	82,211	50,149	29,475	20,630	37,047	79.6
<b>TOTAL</b>	<b>1,048,431</b>	<b>639,544</b>	<b>359,862</b>	<b>252,363</b>	<b>480,306</b>	<b>74.9</b>

Table 6 shows the amount of allowance individual LAs have used for the last three reporting years. Over the last two years Wales has reduced the amount of BMW sent to landfill by 21% which is a reduction of 154,879 tonnes compared to the amount landfilled in 2006/7. Also, since the first full reporting year in 2005/6, LAs have reduced the amount of BMW sent to landfill by 30% compared to 851,489 tonnes in 2005/6.

Overall 68% of LAs used proportionately less of their allowance allocations compared to 2007/8. This is in addition to the actual allowance allocations decreasing between the two years. In 2008/9 the two LAs which extended their headroom most compared to 2007/8 were Carmarthenshire (20%) and Isle of Anglesey (12%).

Seven LAs used proportionately more of their allowance compared to 2007/8 and therefore decreased their headroom. These were Rhondda Cynon Taff and Powys which both decreased their headroom by 5%; Caerphilly, Wrexham and Newport which all decreased their headroom by 3%, and Torfaen and Gwynedd which both decreased their headroom by less than 1%.

All LAs reduced the actual tonnage of BMW sent to landfill compared to 2007/8. Carmarthenshire made the greatest overall percentage tonnage reduction in the amount of BMW sent to landfill with a decrease of 28% compared to last year, with Isle of Anglesey decreasing by 24%. Neath Port Talbot and Blaenau Gwent decreased the amount of BMW they sent to landfill by 21% and 20% respectively.

Overall Wales is well placed to meet its allowance allocation for the first Landfill Directive target year in 2010. Wales is already 16% or 110,297 tonnes, below this allowance. The second Landfill Directive target is only three years later in 2013 and is set at 470,000 tonnes for Wales which is 66% of the 2010 target. All LAs in Wales will need to ensure they have diverted sufficient BMW from landfill to achieve their

allowance allocations for 2013 and 2020. It is essential that current progress is maintained and continually improved in future years to meet these challenging targets.

**Table 6. Comparison of percentage of LAS Allowances used for last 3 years of the LAS scheme <sup>7</sup>**

Local Authority	Total BMW Landfilled in 2006/7 (tonnes)	LAS Allowance used in 2006/7 (%)	Total BMW Landfilled in 2007/8 (tonnes)	LAS Allowance used in 2007/8 (%)	Total BMW Landfilled in 2008/9 (tonnes)	LAS Allowance used in 2008/9 (%)
Blaenau Gwent	22,209	79.2	20,687	81.3	16,531	72.4
Bridgend	25,220	71.1	22,819	69.7	20,640	68.8
Caerphilly	47,583	77.0	45,354	80.6	42,600	83.9
Cardiff	88,503	90.3	74,377	83.4	63,495	79.0
Carmarthenshire	42,772	90.0	41,164	93.7	29,625	73.3
Ceredigion	14,510	83.1	15,676	96.2	13,571	89.6
Conwy	33,169	78.6	27,150	69.0	24,483	66.3
Denbighshire	23,165	86.6	21,524	88.5	19,034	87.0
Flintshire	35,508	73.8	36,764	83.1	31,332	77.6
Gwynedd	35,588	91.7	31,808	89.6	28,920	89.7
Isle of Anglesey	22,471	93.4	17,027	78.1	12,865	65.8
Merthyr Tydfil	16,020	78.1	15,609	84.0	13,237	79.4
Monmouthshire	19,700	72.9	18,621	75.0	15,806	69.8
Neath Port Talbot	33,689	59.6	29,249	57.1	23,149	50.4
Newport	29,504	72.8	27,391	73.6	25,951	76.4
Pembrokeshire	34,433	93.9	30,892	90.1	27,030	84.8
Powys	27,834	83.0	26,389	84.4	25,886	89.2
Rhondda Cynon Taff	56,128	87.0	45,512	77.4	43,898	82.6
Swansea	56,960	66.5	54,597	68.7	49,762	67.9
Torfaen	23,746	74.5	20,931	72.3	18,928	72.8
Vale of Glamorgan	29,148	87.2	25,850	84.3	23,485	84.1
Wrexham	36,723	80.8	31,520	76.4	29,475	79.6
<b>Wales Total</b>	<b>754,582</b>	<b>79.9</b>	<b>680,912</b>	<b>78.6</b>	<b>599,703</b>	<b>76.1</b>

	Reduced amount of allowance used by at least 10% compared to last year
	Reduction in allowance used compared to last year <10%
	Used proportionally more of allowance compared to last year.

<sup>7</sup> 2004/05 was the first reporting year, but only recorded data for the last two quarters

## 6. Regional Comparisons

This section looks at the landfill allowance results for 2008/9 in relation to the three regions in Wales – North, South East, South West. The split of Wales into these three regions is used for the regional waste groups in terms of land-use planning for an integrated and adequate network of waste facilities in Wales. There is also similar information for the WLGA regional partnership board groupings in Annex 3.

South East Wales includes 10 LAs and Table 7 shows that this region sent the most BMW to landfill, accounting for 46% of the Wales total BMW landfilled. South East Wales does, however, have the largest proportion of MSW arising at 44% of the Wales total. South West and North Wales have 6 and 7 LAs respectively and sent similar amounts of BMW to landfill, each accounting for 27% of the Wales total. South West Wales has the greatest headroom in relation to its landfill allowance and meeting their future allowance allocations.

**Table 7. Amount of BMW landfilled compared to landfill allowance for each region**

Region	2008/9 LAS Allowance (tonnes)	Total BMW Landfilled 2008/9 (tonnes)	% of LAS Allowance Used
South East Wales	348,885	276,874	79.4
South West Wales	236,580	163,778	69.2
North Wales	202,536	159,051	78.5
<b>Total</b>	<b>788,000</b>	<b>599,703</b>	<b>76.1</b>

\* Powys figures are split 50% between South East and North Wales

Within each region, it is possible to look more closely at a LA level. Figures 4-6 cover the regions in turn and show the allowance allocation for each authority and actual BMW sent to landfill in 2008/9. There are differences within each region, with some LAs with greater headroom than others in relation to their landfill allowances.

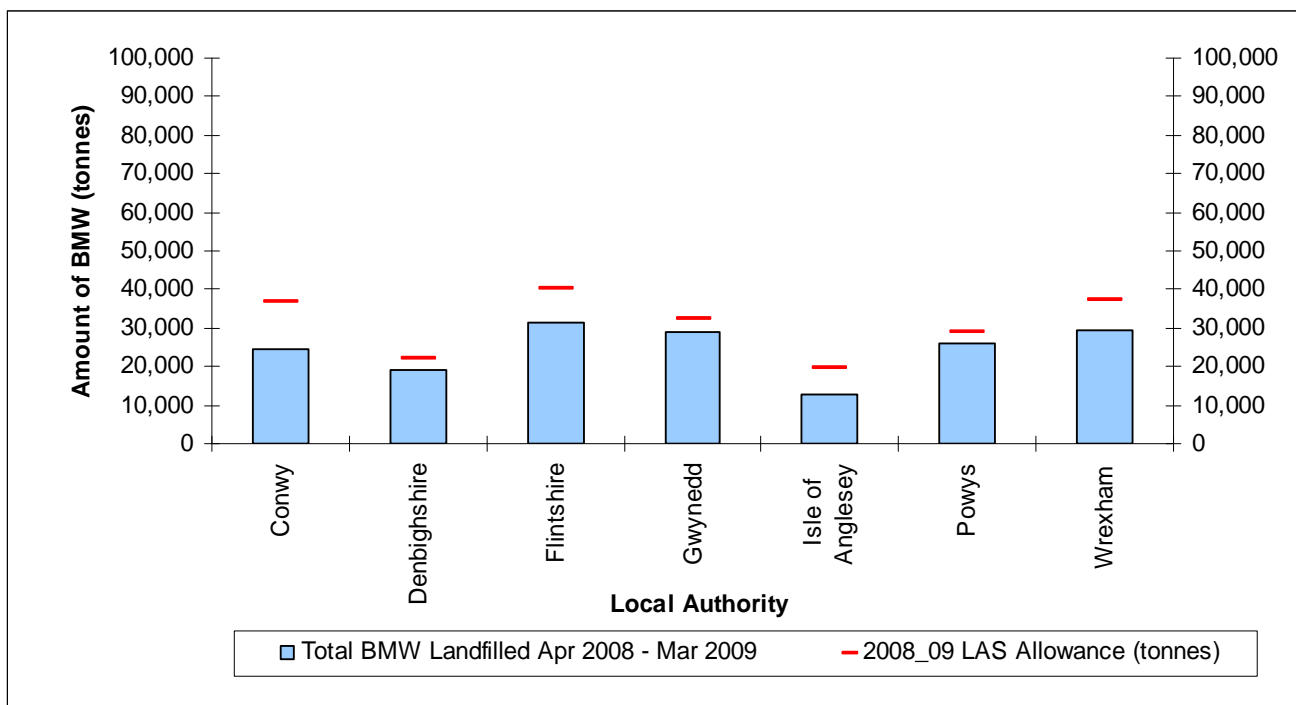
### 6.1 North Wales

North Wales used 79% of its landfill allowance and accounted for 27% of the total amount of BMW sent to landfill in Wales.

The seven LAs in the North Wales region varied widely in the amount of headroom in relation to their landfill allowances, from 34% to only 10%. Conwy and Isle of Anglesey had the greatest headroom in the region with both using 66% of their allocated allowances. Gwynedd, Powys and Denbighshire had the smallest headroom in the region using 87 - 90% of their allowances.

Isle of Anglesey had one of the greatest overall percentage tonnage reductions in BMW landfilled in Wales with a reduction of 24% in 2008/9 compared to 2007/8. Flintshire also showed a significant reduction this year by diverting 15% more BMW from landfill compared to 2007/8.

**Figure 4. Amount of BMW landfilled compared to landfill allowance for LAs in North Wales in 2008/9**



NB. Total BMW landfilled for Powys has been shown on both the South East and North Wales graphs, as a 50% regional split of Powys figures would not be well represented.

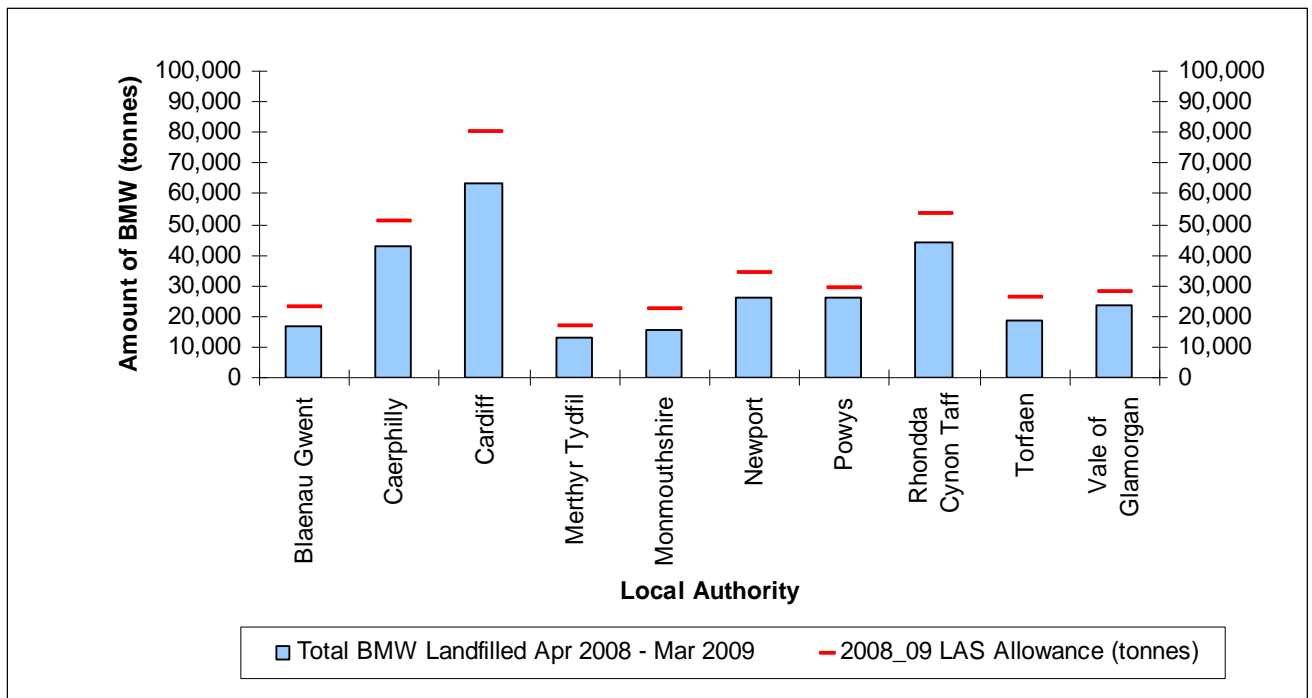
## 6.2 South East Wales

South East Wales used 79% of its regional landfill allowances and accounted for 46% of the total amount of BMW sent to landfill from Wales.

The ten LAs in South East Wales region varied in the amount of headroom in relation to their landfill allowances, but all were within 11-30% of their allocated allowances. The LAs with the smallest headroom in the region were Powys, Vale of Glamorgan, Caerphilly and Rhondda Cynon Taff using between 83-89% of their allowances.

Blaenau Gwent had one of the greatest overall percentage tonnage reductions in BMW landfilled in Wales with a reduction of 20% compared to 2007/8. Cardiff, Merthyr Tydfil and Monmouthshire also showed significant reductions this year by all diverting 15% more BMW from landfill compared to 2007/8.

**Figure 5. Amount of BMW landfilled compared to landfill allowance for LAs in South East Wales 2008/9**



NB. Total BMW landfilled for Powys has been shown on both the South East and North Wales graphs, as a 50% regional split of Powys figures would not be well represented.

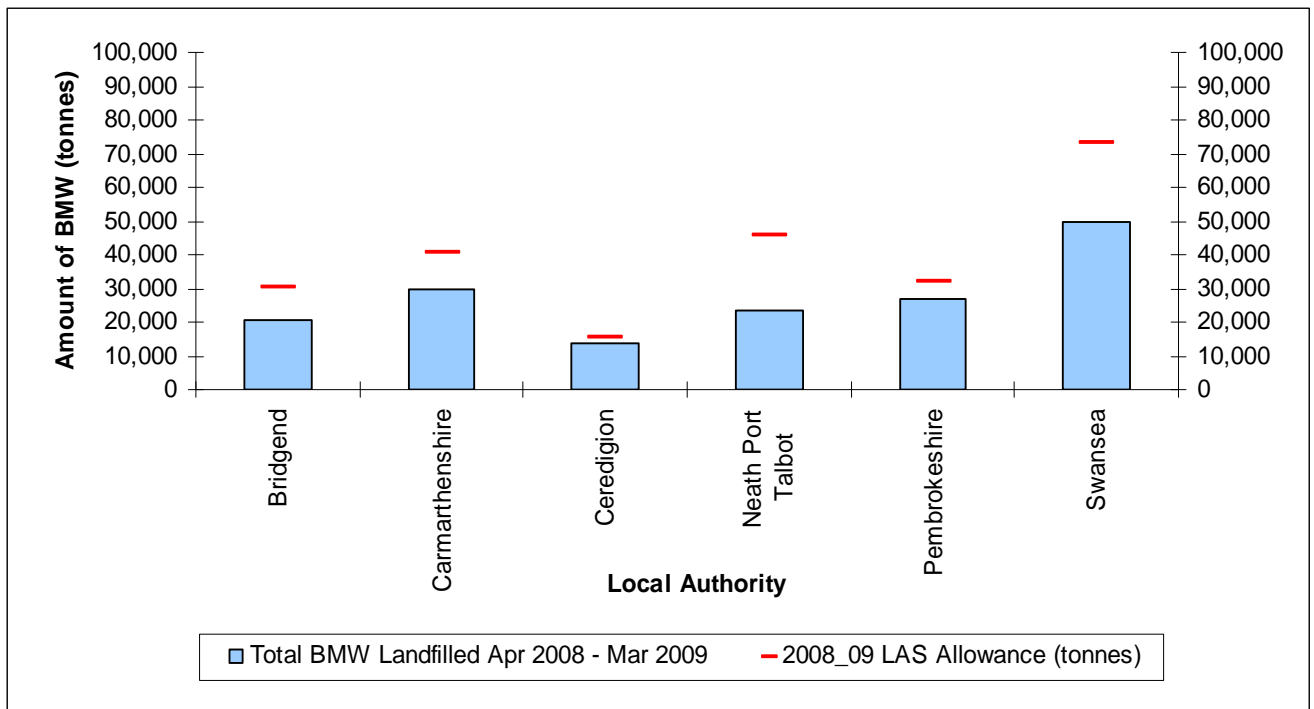
### 6.3 South West Wales

South West Wales had the greatest headroom in relation to its landfill allowance using 69% of its allowance allocation. This region accounts for 27% of the total amount of BMW sent to landfill in Wales

Neath Port Talbot, Swansea and Bridgend were among those LAs with the greatest headroom in Wales using 50%, 68% and 69% of their allowances respectively. The LAs with the smallest headroom in the region were Ceredigion and Pembrokeshire using 90% and 85% respectively of their allowances.

Carmarthenshire had the greatest overall percentage tonnage reduction in BMW landfilled in Wales with a reduction of 28% in 2008/9 compared to 2007/8. Neath Port Talbot also showed a significant reduction this year by diverting 15% more BMW from landfill compared to 2007/8.

**Figure 6. Amount of BMW landfilled compared to landfill allowance for LAs in South West Wales in 2008/9**



## 7. Improving LAS

This section includes a summary of the guidance produced and development areas that are underway to improve LAS.

### **Prompt data reporting by Local Authorities**

LAs have continued the trend of improved reporting in 2008/9 compared to previous years. We would like this level of prompt reporting to continue and, where possible, improve in future years. The reporting protocol<sup>8</sup> provided in 2008/9 outlines the statutory reporting and penalties process. It also clarifies the process and timescales by which data is validated and finalised and includes details of when data can be changed by LAs after this point.

### **MRF and reprocessor reject rates**

Many LAs send material to be recycled and residual waste to a MRF or reprocessor. The reject rate is the amount of residue sent for disposal. This information is needed for the mass balance calculation. When reporting data in WDF, a LA must specify the reject rate associated with each facility. EAW has undertaken work during 2008/9 to review reject rates reported into WDF in consultation with LAs. Further work is planned in 2009/10.

### **Final destination of waste materials**

Many LAs send material to be recycled and residual waste to brokers, intermediaries and reprocessors. Sometimes the waste is reprocessed and recovered in the UK, and at other times it is exported. EAW issued guidance, following consultation with the LAs in 2008/9 on 'Reporting final destinations on municipal waste'<sup>9</sup>. This requests that the final facility destinations in the UK are provided for LAS purposes. The guidance needs to be implemented by all LAs in Wales. We need this information so that we can demonstrate that reprocessing and recovery is legitimate and has diverted waste from landfill.

### **Monitoring Mechanical Biological Treatment (MBT) & other treatment processes**

EAW will shortly be issuing revised guidance on monitoring MBT and other similar treatment processes being used to bring about landfill diversion of biodegradable municipal waste. The guidance will be for England and Wales and will replace the guidance issued in August 2005.

### **Review of Biodegradable Percentage of Municipal Solid Waste (MSW)**

In Wales, the biodegradable component of MSW is deemed to be 61% under the LAS Regulations. A compositional analysis is being carried out throughout 2009 and the results will be published in spring of 2010. Depending on the findings, the LAS Regulations may need to be amended.

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<sup>8</sup> LAS Guidance on reporting and notices' Protocol for the Landfill Allowances Scheme (Wales), Environment Agency Wales, May 2008

<sup>9</sup> [http://www.wastedataflow.org/documents/WalesWMT/Final\\_Destination\\_Briefing\\_Note\\_Wales.pdf](http://www.wastedataflow.org/documents/WalesWMT/Final_Destination_Briefing_Note_Wales.pdf)

### **Improvements in WDF**

- During 2008/9 LAs that put their residual waste through some kind of treatment prior to landfill were able to record a breakdown of any arising recyclate in Question 70. For 2009/10 they are now able to record the destinations of these materials in the newly created Question 19a. In doing this the diversion can now be counted in the mass balance equation. Question 70 has also been updated to allow for the inclusion of more data.
- In 2008/9 it was decided that the material list in WDF should be updated as many LAs were recording their recyclate under 'Other Materials'. All LAs were consulted on what new materials they would like to see in an updated list. For 2009/10 a new material list is in operation, which includes a number of new materials and expanded categories of existing materials. It is now also possible for LAs to create a list of materials specific to them, making data entry easier.
- Questions 19, 35 and the new 19a have been updated to allow LAs to report the destination against a material type if desired. Rather than material against destination as was standard. This has made data entry easier for some LAs.
- The reporting section of WDF continues to improve with a number of new reports being made available in 2008/9. Enviro are looking to develop this section with more tailor-made reports.

### **WasteDataFlow Training**

We will continue to provide training as and when it is required in 2009/10 to help LAs with reporting timely and accurate data into WDF. During 2008/9, nine LAs were provided with training on the use of WDF by EAW.

### **Prompt and accurate data reporting by Landfill Operators**

A new web based system has been developed to collect information directly from operators. GOR is expected to go live in the autumn of 2009. This is part of a general improvement in the way EAW gather waste data will allow much quicker access to data reported from permitted facilities. We will also continue to work with landfill operators to improve the accuracy of landfill site returns. The Welsh Assembly Government and EAW will continue raising awareness with industry on the importance of the Duty of Care, categorising waste correctly using EWC codes and the interpretation of the definition of municipal waste under the LAS regulations.

### **Achieving future municipal waste targets**

The results of this report show that Wales as a whole is currently 16% within the landfill allowance for 2009/10. This is an improvement on 2007/8, as all LAs in Wales are now currently within their 2009/10 allowances, compared to 2007/8 where only 11 Local Authorities were within their 2009/10 targets. LAs must ensure the amounts of BMW sent to landfill should remain below 710,000 tonnes so they can continue to meet the Landfill Directive target for 2010. They will also need to divert sufficient BMW from landfill by maximising recycling and composting of municipal waste and using alternative residual waste treatment to meet the more stringent Landfill Directive targets for 2013 and 2020.

**We would welcome any feedback on the report, including its structure and content for future years. If you do have any comments please email them to [LAS@environment-agency.gov.uk](mailto:LAS@environment-agency.gov.uk)**

## Annex 1 – Reporting of Local Authorities

Table A1. Dates of reporting by LAs of WDF data

Local Authority	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
	Date rolled up. Deadline: 31/07/08	Date rolled up. Deadline: 31/10/08	Date rolled up. Deadline: 2/2/09*	Date rolled up. Deadline: 05/05/9**
Blaenau Gwent	31/07/2008	30/10/2008	02/02/2009	01/05/2009
Bridgend	30/07/2008	04/11/2008	28/01/2009	30/04/2009
Caerphilly	31/07/2008	29/10/2008	29/01/2009	29/04/2009
Cardiff	29/07/2008	28/10/2008	04/02/2009	01/05/2009
Carmarthenshire	21/07/2008	22/10/2008	28/01/2009	05/05/2009
Ceredigion	07/08/2008	10/11/2008	03/02/2009	05/05/2009
Conwy	29/07/2008	30/10/2008	30/01/2009	01/05/2009
Denbighshire	06/08/2008	04/11/2008	02/02/2009	06/05/2009
Flintshire	01/08/2008	04/11/2008	02/02/2009	05/05/2009
Gwynedd	31/07/2008	29/10/2008	30/01/2009	01/05/2009
Isle of Anglesey	05/08/2008	30/10/2008	25/01/2009	05/05/2009
Merthyr Tydfil	30/07/2008	31/10/2008	02/02/2009	05/05/2009
Monmouthshire	06/08/2008	03/11/2008	04/02/2009	05/05/2009
Neath Port Talbot	30/07/2008	27/10/2008	28/01/2009	30/04/2009
Newport	29/07/2008	30/10/2008	29/01/2009	27/04/2009
Pembrokeshire	15/07/2008	17/10/2008	21/01/2009	24/04/2009
Powys	30/07/2008	31/10/2008	27/01/2009	05/05/2009
Rhonda Cynon Taff	31/07/2008	31/10/2008	29/01/2009	30/04/2009
Swansea	31/07/2008	03/11/2008	04/02/2009	30/04/2009
Torfaen	29/07/2008	28/10/2008	30/01/2009	30/04/2009
Vale of Glamorgan	06/08/2008	06/11/2008	03/02/2009	05/05/2009
Wrexham	30/07/2008	03/11/2008	02/02/2009	01/05/2009

\* Q3 deadline extended due to deadline coinciding with a weekend.

\*\* Q4 deadline extended due to WDF technical problems.

	% on time
	% within 7 days
	% over 7 days

## Annex 2 – Calculating performance: mass balance

There is a statutory requirement on the Environment Agency (EA) as the monitoring authority for LAS and LATS to calculate the amount of BMW sent to landfills by each waste disposal authority in England and Wales during the scheme year. In order to do this, the monitoring authority must:

- Step 1** Calculate the amount of BMW by weight in the amount of collected municipal waste for each scheme year;
- Step 2** If components of collected municipal waste are sent to any waste facilities subtract from the amount calculated under step 1 the amount of BMW by weight which is sent to those facilities; and
- Step 3** If any of the collected municipal waste is sent to landfills either after treatment or as rejects from facilities, add the amount of BMW by weight which is sent to those landfills

This is shown in more detail in the example calculation given at the end of this Annex.

### Step 1

1. In Wales the amount of biodegradable waste in an amount of collected municipal waste is deemed to be 61% of the collected municipal waste.
2. To calculate the amount of BMW by weight for each WDA in each scheme year, we will multiply the amount of collected municipal waste for the scheme year by the deemed percentage.

### Step 2

3. The mass balance system calculates the contribution made from each component diverted from landfill, by multiplying its weight by a nominal biodegradable percentage given in Table A2.
4. The basis of the nominal biodegradable percentage (Table A2) is chemical analysis from the National Household Waste Analysis Programme, published by Department of Environment in 1993. This has been adapted to show components consisting of biogenic carbon to be a 100% biodegradable component, fractions with no carbon or solely fossil carbon to be zero and those with a mixture to be 50%.

**Table A2. The percentage biodegradability of separated fractions of MSW**

Type of waste	Amount of biodegradable municipal waste
Paper and Card	100%
Putrescible waste	100%
Vegetable oil	100%
Wood	100%
Footwear	50%
Furniture	50%
Textiles	50%
Mineral Oil	0%
Electrical and electronic	0%
End-of-life vehicles	0%
Glass	0%
Inert construction and demolition	0%
Metal	0%
Plastic	0%
Soil	0%

5. The EA must be provided with type and weight of any collected municipal waste diverted to waste facilities irrespective of whether the waste is biodegradable or not and the final destination of all collected municipal waste.

### Step 3

6. Where collected municipal waste is treated and then landfilled, the EA needs to know what the biodegradable diversion through loss of biodegradable carbon products has been. A consultation exercise informed the EA how to monitor the reduction in biodegradability from waste pre-treatment processes.
7. From the monitoring data supplied, the EA will add the amount of BMW by weight sent to landfill from any treatment facility. We will take into account any reduction in biodegradability of the collected municipal waste achieved by the specific treatment facility.

An example of the mass balance calculation is shown below:

MSWt = Total Collected Municipal Waste  
 BMWt = Total Biodegradable Municipal Waste  
 DivT = Total Collected Municipal Waste Diverted  
 DivB = Biodegradable Content of Diverted Waste  
 ResT = Total Residual Waste  
 ResB = Biodegradable Content of Residual Waste  
 RB% = Residual Biodegradable Percentage  
 LD = Directly Landfilled Municipal Waste  
 LTh = Landfilled after Thermal Treatment (Landfill tonnes from Q54, Q55, Q57\*)  
 LMBT = Landfilled after MBT (Landfill tonnes from Q59\*)  
 MBTRF = MBT Reduction Factor (i.e. factor MBT reduces RB%)  
 LOT = Landfilled after Other Treatments (Landfill tonnes from Q56, Q58, Q60 to 65\*)  
 DivR = Rejected Diverted Waste  
 BMWL = Biodegradable Municipal Waste Landfilled

### Mass Balance Calculation for Wales

Step 1  $BMWt = 61\% \times MSWt$   
 $ResT = MSWt - DivT$   
 $ResB = BMWt - DivB$   
 Step 2  $RB\% = (ResB/ResT) \times 100$  or  $(BMWt - DivB) \times 100$   
 $(MSWt - DivT)$   
 Step 3  $BMWL = (LD \times RB\%) + (LTh \times 0\%) + (LMBT \times (RB\% \times MBTRF)) + (LOT \times RB\%) + (DivR \times RB\%)$   
 \* Question numbers from WasteDataFlow

## Pre-treating BMW

Pre-treatment can reduce the biodegradability of the waste. In working out a mass balance for a LA, we have to take into account any municipal waste pre-treated before landfilling. We issued non-statutory guidance in August 2005 to help in advising on methods of monitoring the reduction in biodegradability across a MBT process. We will be releasing revised guidance shortly.

For waste to landfill from MBT or other pre-treatment technology, if a LA wants this to be taken into account, we are keen that they make use of the guidance on monitoring and put in place suitable monitoring plans. This will lead to better data and improve the confidence in the data we submit through Government to the EU on landfill diversion.

Currently there is one MBT plant in Wales that has a monitoring plan to assess the reduction in biodegradability of the process (see Table A3).

**Table A3 Known MBT plants with a monitoring plan in Wales**

Plant	LAs using plant	Comments
MBT plant at: Bryn Posteg Landfill site	Powys & Ceredigion	Powys and Ceredigion have an accepted MBT monitoring plan for the composting facility at Bryn Posteg Landfill site.

### Annex 3 – Regional Partnership Boards

This section looks at the landfill allowance results for 2008/9 in relation to the WLGA regional partnership boards set up in Wales.<sup>10</sup> Central Wales includes Ceredigion and Powys only. Table A4 shows the amount of BMW landfilled compared to landfill allowances for the four groupings.

**Table A4. Amount of BMW landfilled compared to landfill allowances for the WLGA Regional Partnership Boards**

Region	2008/9 LAS Allowance (tonnes)	Total BMW Landfilled 2008/9 (tonnes)	% of LAS Allowance used
Central Wales	44,152	39,457	89.4
North Wales	188,032	146,108	77.7
South East Wales	364,388	284,572	78.1
South West Wales	191,428	129,566	67.7
<b>Total</b>	<b>788,000</b>	<b>599,703</b>	<b>76.1</b>

Within each region, it is possible to look more closely at a LA level. Figures A1-A4 cover the regions in turn and show the allowance allocation for each LA and actual BMW sent to landfill in 2008/9. There are differences within a region, with some authorities with greater headroom in relation to their landfill allowances.

There is wide variation in remaining headroom for the 4 regions, which used between 68% and 89% of their allowances. South West Wales has the greatest headroom at 68% compared to its overall allocated allowance, this region was the only one to use less of their allocated allowance compared to Wales as a whole, which used 76%.

#### Central Wales

Central Wales has the least headroom, using 89% of its allowance. The two LAs in Central Wales are Ceredigion and Powys which both used between 89% and 90% of their allowances and were among the LAs with the least headroom in Wales (Figure A1).

#### North Wales

The six LAs in the North Wales region varied between 66% and 90% in the amount of allowance they used. Isle of Anglesey and Conwy both used 66% of their allowances and have the most headroom. Gwynedd used 90% of its allowance and has the least headroom (See Figure A2).

#### South East Wales

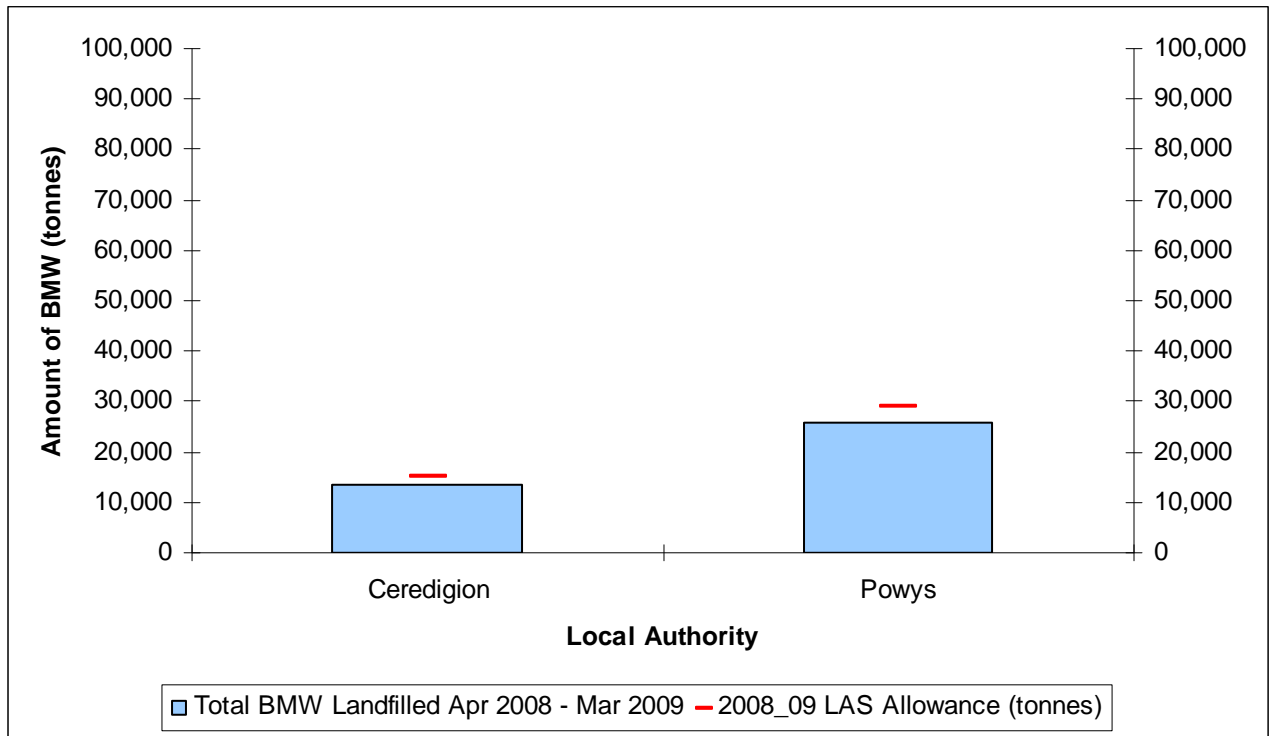
The ten LAs in the South East Wales region varied between 69% and 84% in the amount of allowance they used. Bridgend, Monmouthshire, Blaenau Gwent and Torfaen have the greatest headroom, each using between 69% and 73% of their allocated allowances. The LAs with the least headroom were Rhondda Cynon Taff, Caerphilly and Vale of Glamorgan which used between 83% and 84% of their allowances (See Figure A3).

#### South West Wales

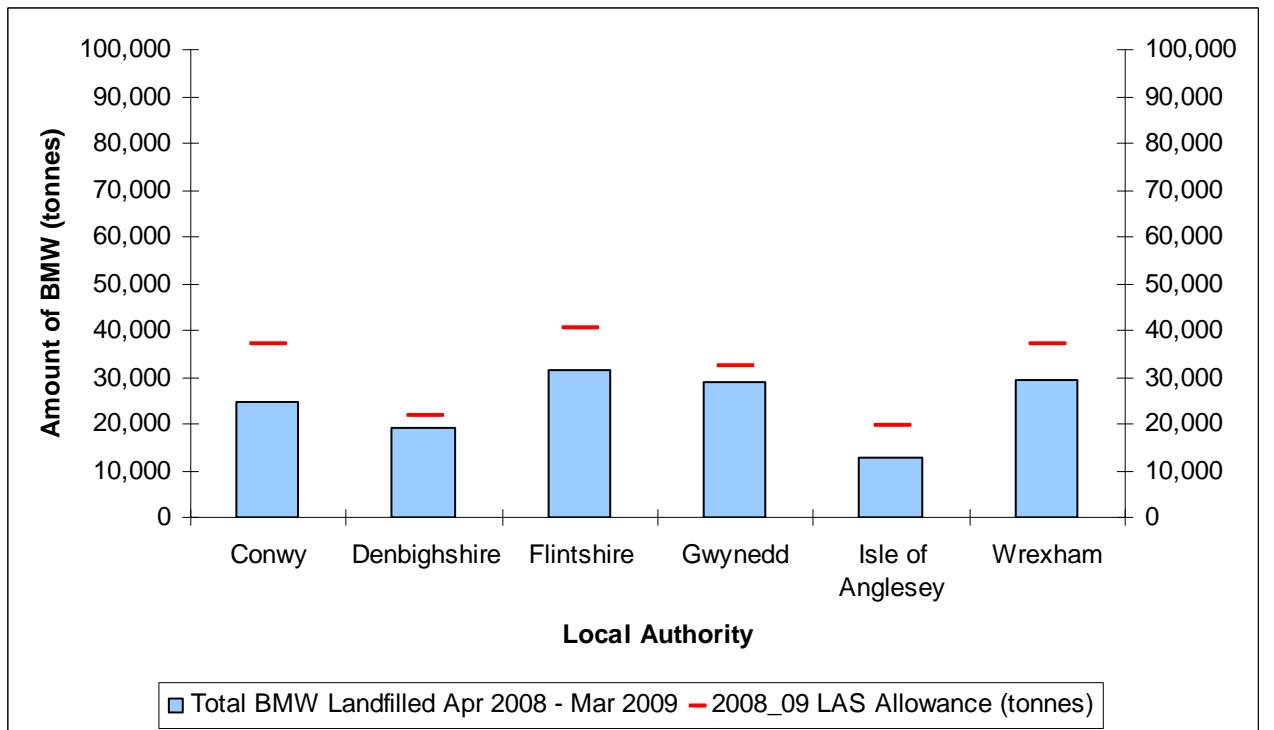
South West Wales had the greatest headroom in relation to its landfill allowance using 68% of its allowance, this is helped by the fact that two of the LAs in the region had the greatest headroom in Wales. LAs varied from 50% to 85% in the amount of allowance used (see Figure A2). Neath Port Talbot and Swansea used 50% and 68% of their allowances respectively. The other two LAs in the region, Carmarthenshire and Pembrokeshire used 73% and 85% of their allowances (see Figure A4).

<sup>10</sup> More information on Regional Partnership Board groupings can be found on WLGA's website: [www.wlga.gov.uk/english/regional-boards-networks/](http://www.wlga.gov.uk/english/regional-boards-networks/)

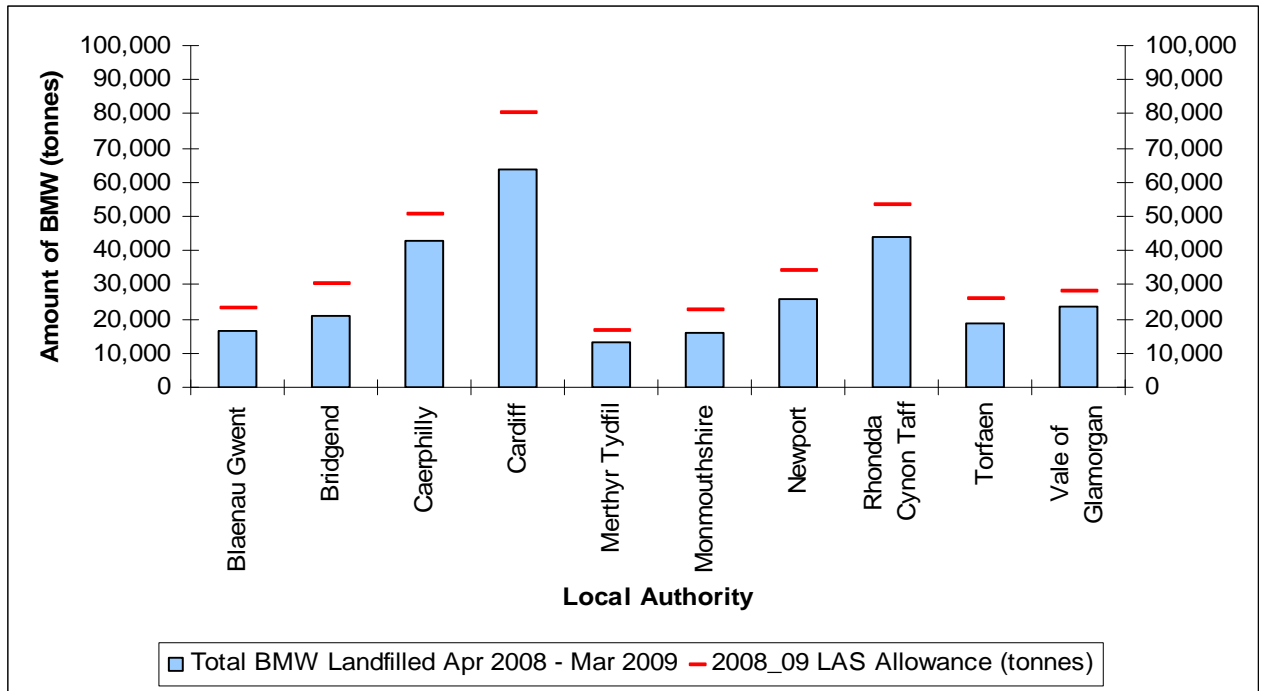
**Figure A1. Amount of BMW landfilled compared to landfill allowance for LAs in Central Wales 2008/9**



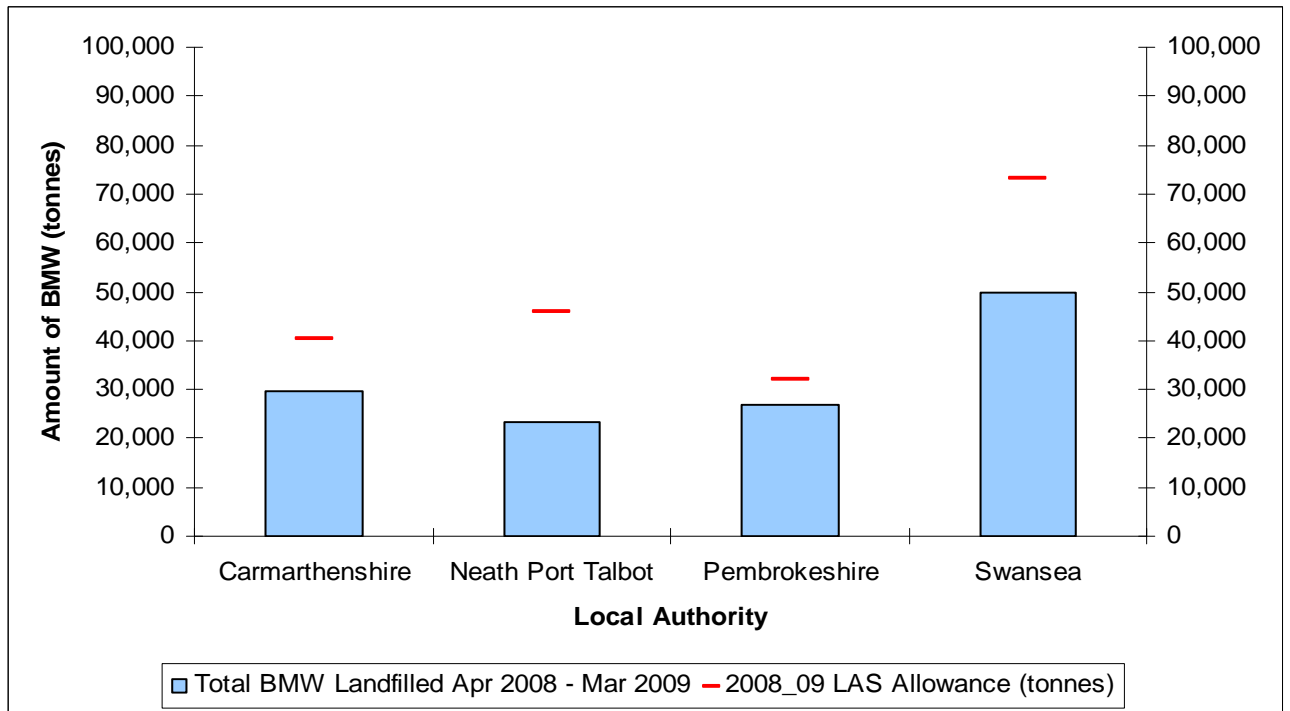
**Figure A2. Amount of BMW landfilled compared to landfill allowance for LAs in North Wales in 2008/9**



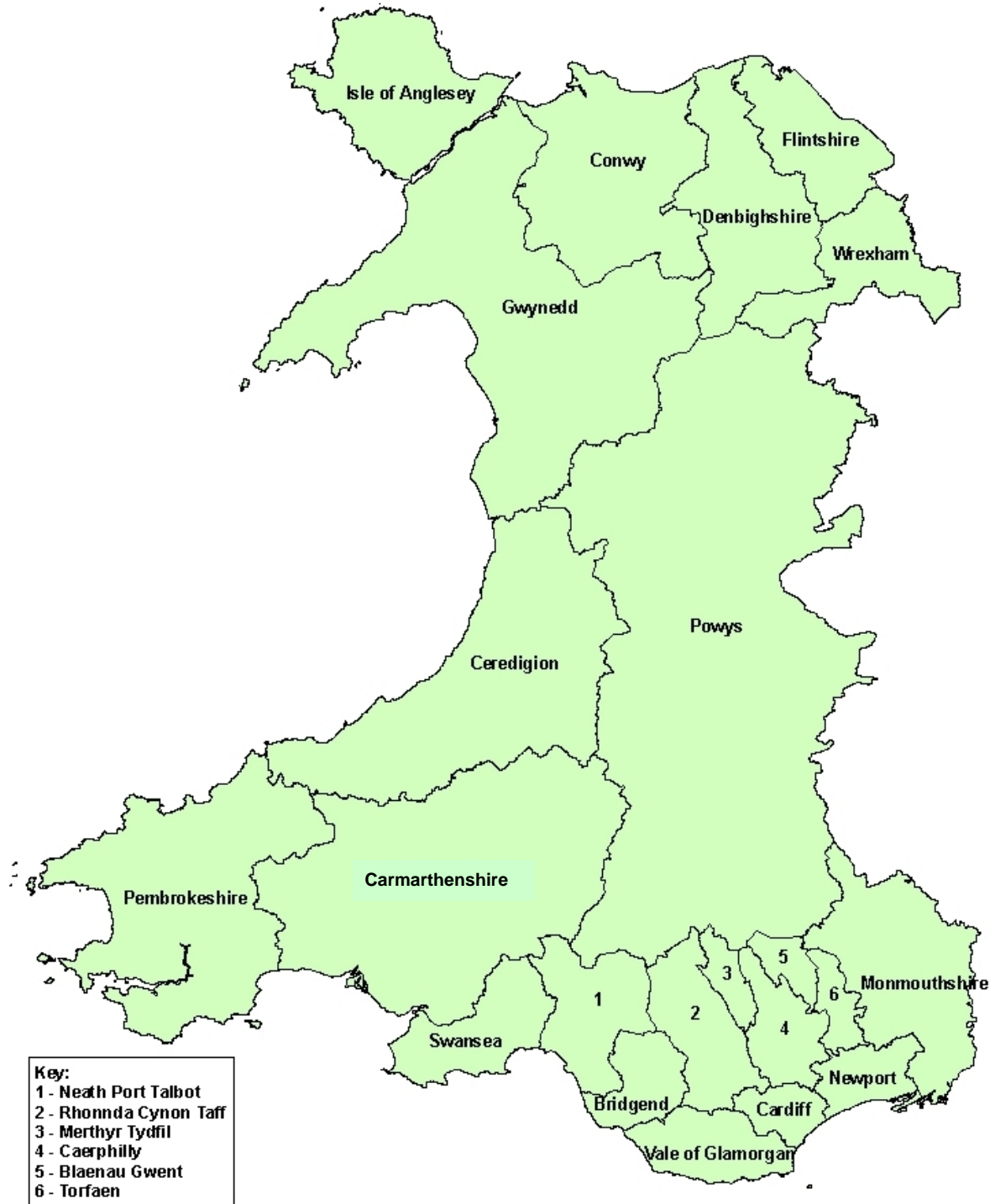
**Figure A3. Amount of BMW landfilled compared to landfill allowance for LAs in South East 2008/9**



**Figure A4. Amount of BMW landfilled compared to landfill allowance for LAs in South West in 2008/9**



## Annex 4 – Local Authority Compliance Data Summaries



# Blaenau Gwent

## Landfill Sites Used

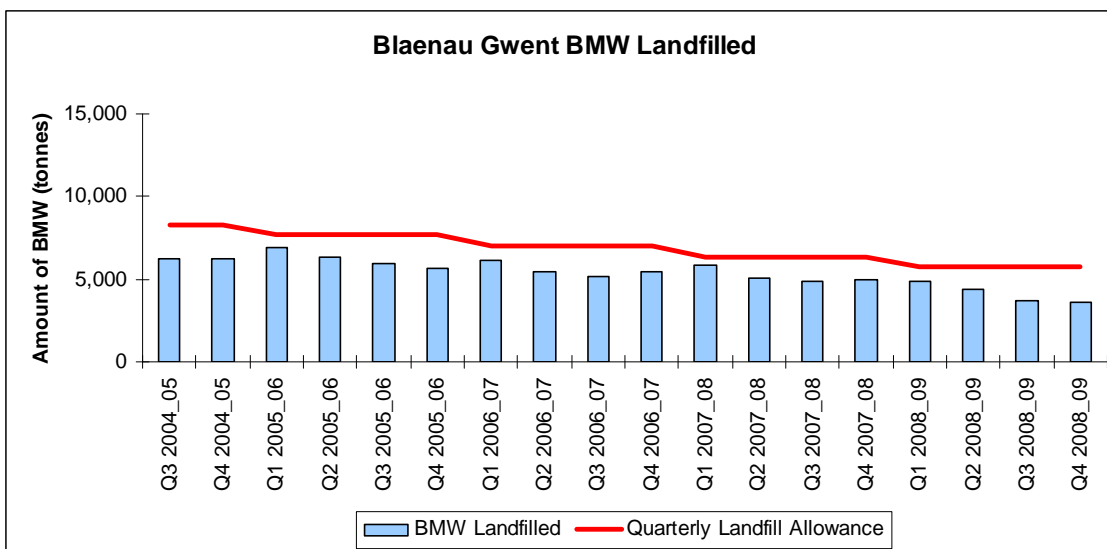
Silent Valley Waste Services  
 Waunllwyd Landfill Site  
 NP23 4TN  
 (PPC No. MP3835SV)

**2008/ 2009 Allowance = 22831 tonnes**

Blaenau Gwent were 6300 tonnes (27.6%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	4839	5707	-868
2	4422	5708	-1286
3	3680	5708	-2028
4	3590	5708	-2118
<b>Total</b>	<b>16531</b>	<b>22831</b>	<b>-6300</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	7671	7624	85.1	-0.6
2	7042	7063	65.8	0.3
3	6216	6216	43.2	0.0
4	5955	5958	10.4	0.1



# Bridgend

## Landfill Sites Used

Neath Port Talbot (Recycling) Ltd  
Material Recovery & Energy Centre  
Swansea  
SA1 8PZ  
(PPC No. JP3632LD)

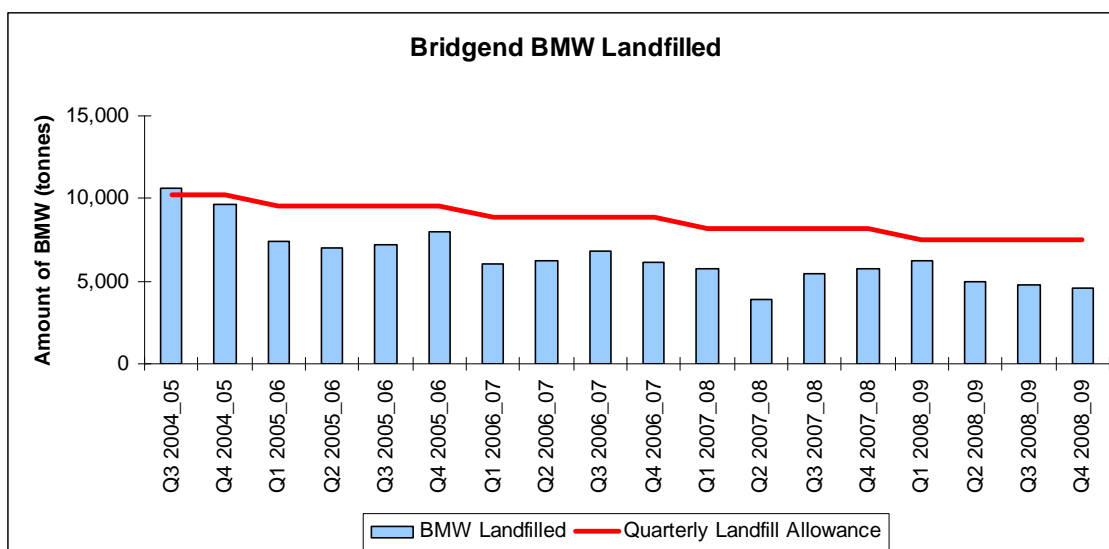
WRG Waste Services Ltd  
Pwllfawatkin Landfill Site  
Neath Port Talbot  
SA8 4RX  
(PPC No. BU8819IV)

**2008/ 2009 Allowance = 30007 tonnes**

Bridgend were 9367 (31.2%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	6263	7501	-1238
2	4988	7502	-2514
3	4789	7502	-2713
4	4600	7502	-2902
<b>Total</b>	<b>20640</b>	<b>30007</b>	<b>-9367</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	11481	10459	- 39.9	- 8.9
2	9041	9891	0.4	9.4
3	8384	8169	- 8.8	- 2.6
4	8564	8528	- 10.9	- 0.4



# Caerphilly

## Landfill Sites Used

Silent Valley Waste Services  
 Waunllwyd Landfill Site  
 NP23 4TN  
 (PPC No. MP3835SV)

County Council of the City and County of Cardiff  
 Lamby Way Landfill Site  
 CF3 2HP  
 (PPC No. JP3239ST)

Newport City Council  
 Docks Way Landfill  
 NP20 2NS  
 (PPC No. DP3733BK)

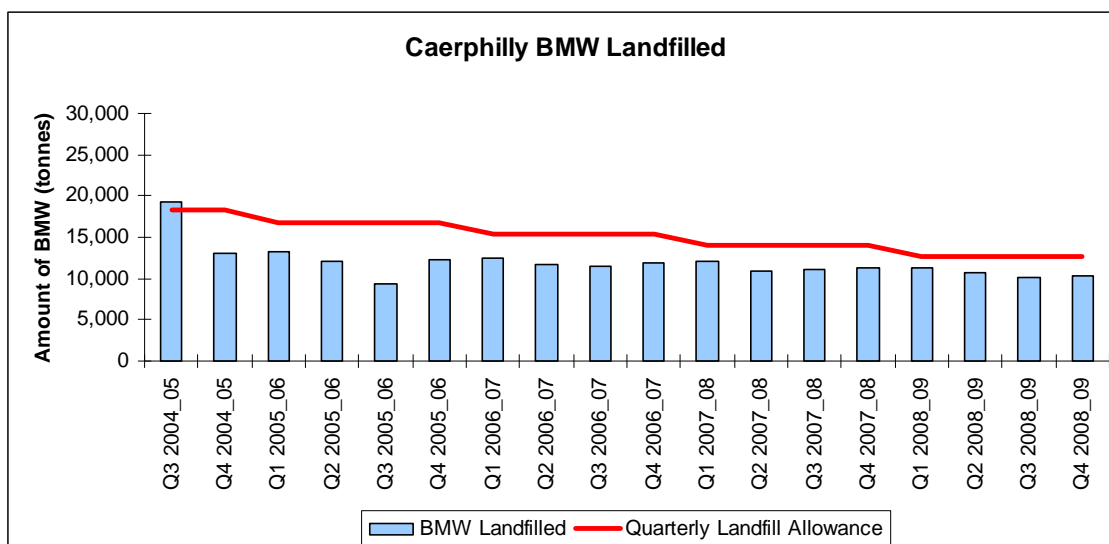
Biffa Waste Services Ltd  
 Trecatti Landfill Site  
 CF48 4AB  
 (PPC No. RP3733PC)

**2008/ 2009 Allowance = 50760 tonnes**

Caerphilly were 8160 tonnes (16.1%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	11369	12690	-1321
2	10672	12690	-2018
3	10196	12690	-2494
4	10363	12690	-2327
<b>Total</b>	<b>42600</b>	<b>50760</b>	<b>-8160</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	17638	16447	56.5	- 6.8
2	17441	16480	18.5	- 5.5
3	16271	15845	12.9	- 2.6
4	16425	16212	- 3.7	- 1.3



# Cardiff

## Landfill Sites Used

The County Council of the City & County of Cardiff  
 Lamby Way Landfill Site  
 CF3 2HP  
 (PPC No. JP3239ST)

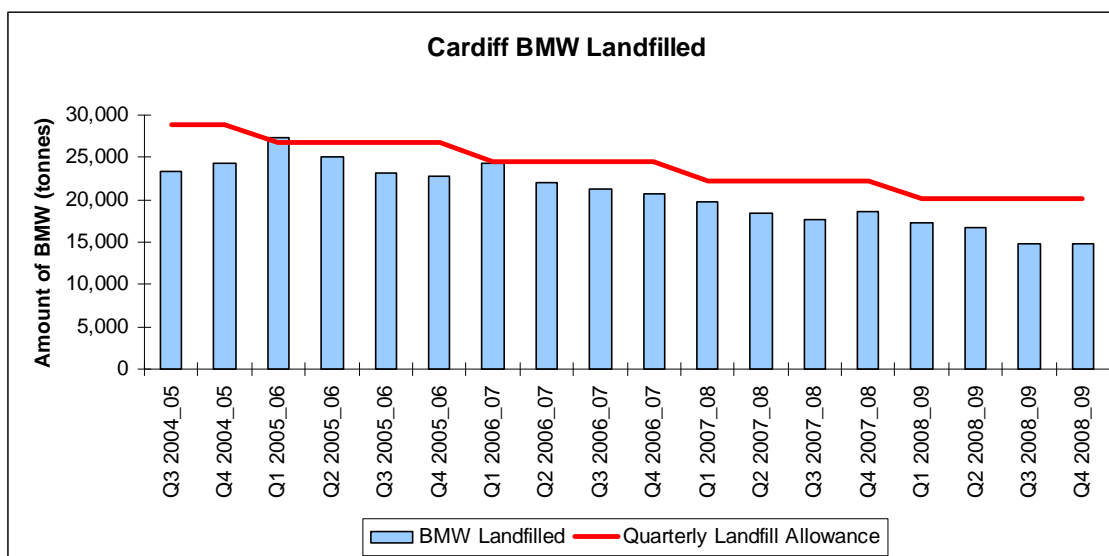
Veolia E S Landfill Limited  
 New Albion Inert, Non Hazardous &  
 SNR Hazardous Waste Landfill  
 DE12 6DH  
 (PPC No. BJ6003IF)

**2008/ 2009 Allowance = 80424 tonnes**

Cardiff were 16947 tonnes (21.1%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	17240	20106	-2866
2	16726	20106	-3380
3	14791	20106	-5315
4	14738	20106	-5386
<b>Total</b>	<b>63495</b>	<b>80424</b>	<b>-16947</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	31232	30710	14.6	- 1.7
2	30259	30200	23.8	- 0.2
3	27420	27387	11.2	- 0.1
4	26420	26800	20.6	1.4



# Carmarthenshire

## Landfill Sites Used

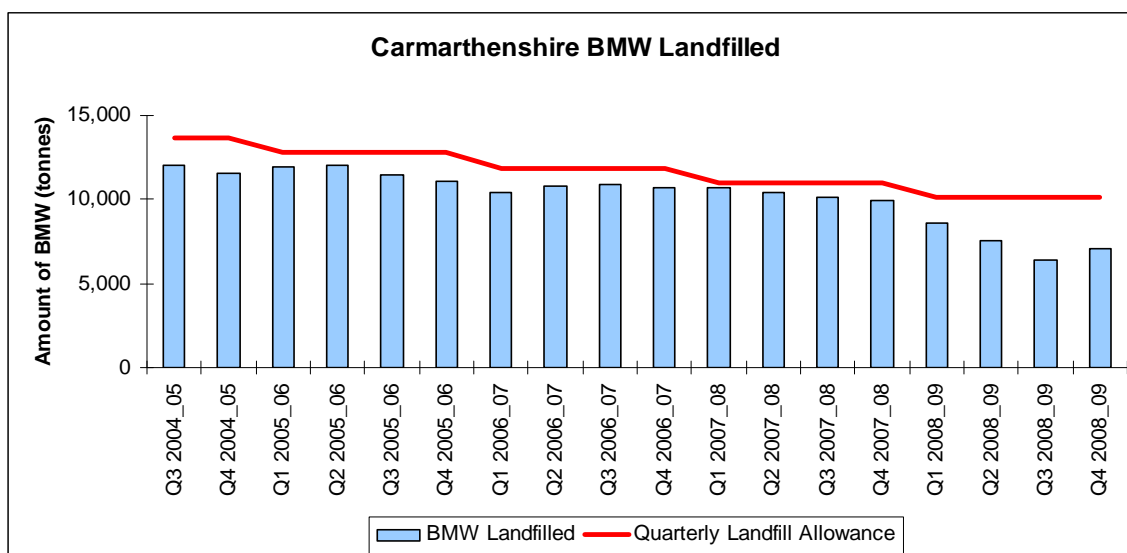
CWM Environmental Ltd  
 Nantycaws Landfill Site  
 Carmarthen  
 SA32 8BG  
 (PPC No. CP3735PB)

**2008/ 2009 Allowance = 40398 tonnes**

Carmarthenshire were 10773 tonnes (26.7%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	8549	10099	-1550
2	7576	10099	-2523
3	6410	10100	-3690
4	7090	10100	-3010
<b>Total</b>	<b>29625</b>	<b>40398</b>	<b>-10773</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	15562	15837	1.7	1.8
2	14484	15719	9.3	8.5
3	11754	11674	-0.4	-0.7
4	12542	12746	5.0	1.6



# Ceredigion

## Landfill Sites Used

Sundorne Products (Llanidloes) Ltd  
(Now called GP Potters)  
Bryn Posteg Landfill Site  
Powys  
SY18 6JJ  
(PPC No. BU77661C)

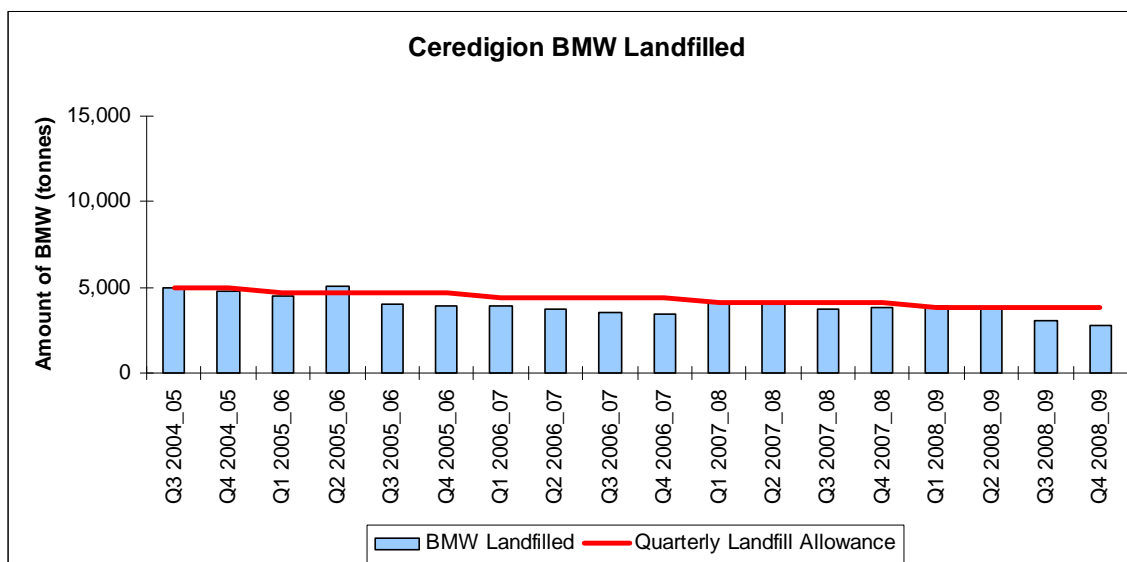
CWM Environmental Ltd  
Nantycaws Landfill Site  
Carmarthen  
SA32 8BG  
(PPC No. CP3735PB)

**2008/ 2009 Allowance = 15145 tonnes**

Ceredigion were 1574 tonnes (10.4%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	3892	3786	106
2	3829	3786	42
3	3066	3786	-720
4	2784	3787	-1002
<b>Total</b>	<b>13571</b>	<b>15145</b>	<b>-1574</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	6263	6210	71.5	-0.8
2	6584	6303	-4.3	-4.3
3	4840	4528	-1.2	-6.4
4	4455	4284	-0.8	-3.8



# Conwy

## Landfill Sites Used

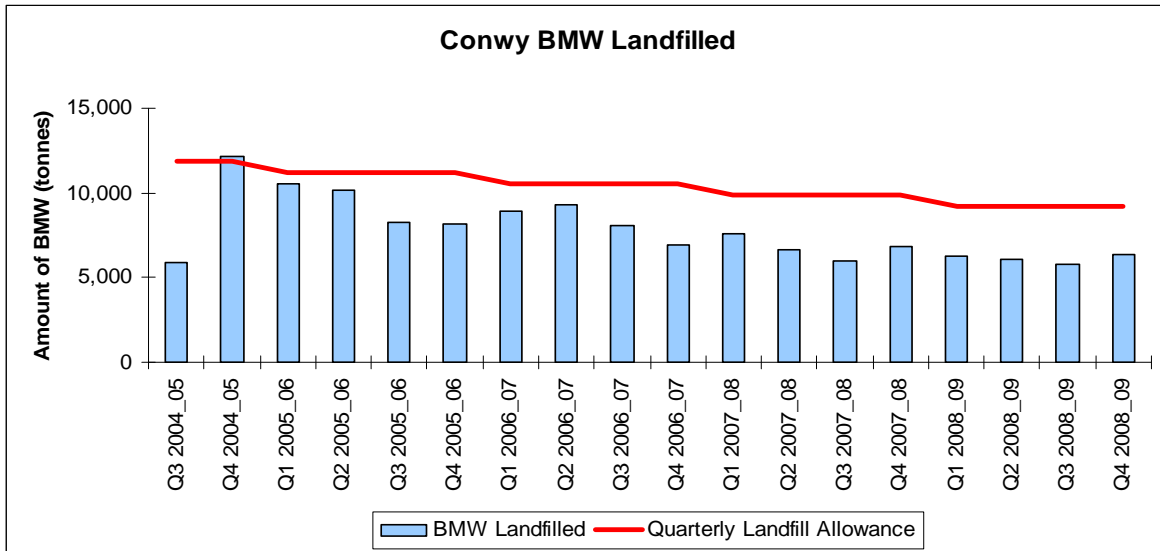
Waste Recycling Group Limited  
 (3 C Waste Management Ltd)  
 Llanddulas Landfill Site  
 Conwy  
 LL22 8WP  
 (PPC No. BU0800IZ)

**2008/ 2009 Allowance = 36942 tonnes**

Conwy were 12458 tonnes (33.7%) within their allowance

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	6291	9235	-2944
2	6081	9235	-3154
3	5746	9236	-3490
4	6366	9236	-2870
<b>Total</b>	<b>24484</b>	<b>36942</b>	<b>-12458</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	10577	10577	0.0	0.0
2	10662	10675	0.1	0.1
3	9402	9455	0.6	0.6
4	9096	9211	1.3	1.3



# Denbighshire

## Landfill Sites Used

Waste Recycling Group Limited  
(Shank Midlands Limited)  
Pen -Y- Bont Landfill Site  
Wrexham  
LL14 5AR  
(PPC No. GP3830BG)

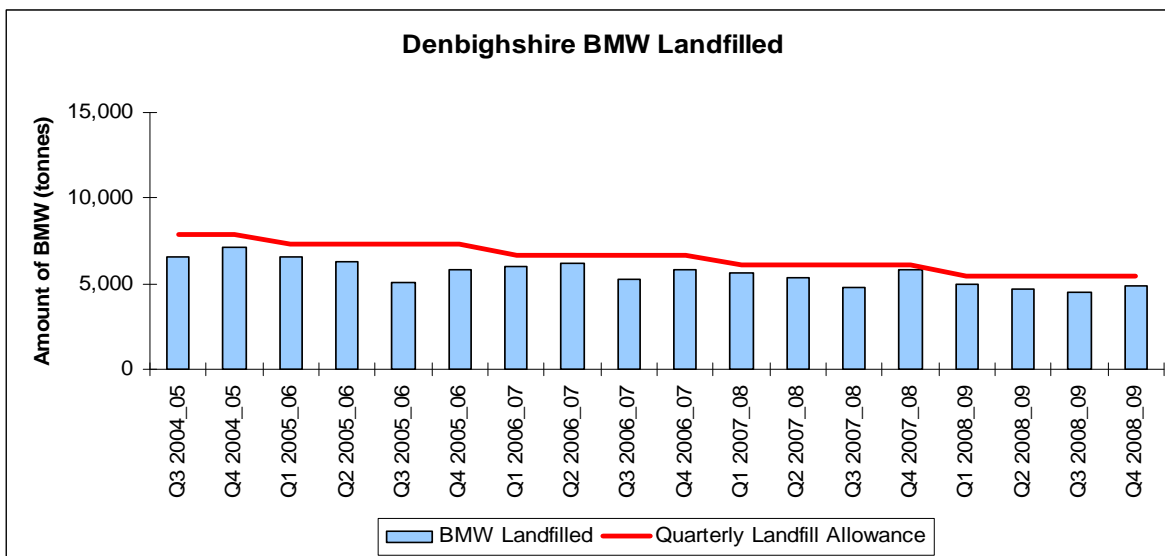
Waste Recycling Group Limited  
(3 C Waste Management)  
Llanddulas Landfill Site  
Conwy  
LL22 8WP  
(PPC No. BU0800IZ)

**2008/ 2009 Allowance = 21884 tonnes**

Denbighshire were 2850 tonnes (13.0%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	4951	5471	-520
2	4732	5471	-739
3	4511	5471	-960
4	4840	5471	-631
<b>Total</b>	<b>19034</b>	<b>21884</b>	<b>-2850</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	8549	7929	6.5	-7.3
2	8359	8364	0.1	0.1
3	7590	7775	2.4	2.4
4	7733	7947	2.8	2.8



# Flintshire

## Landfill Sites Used

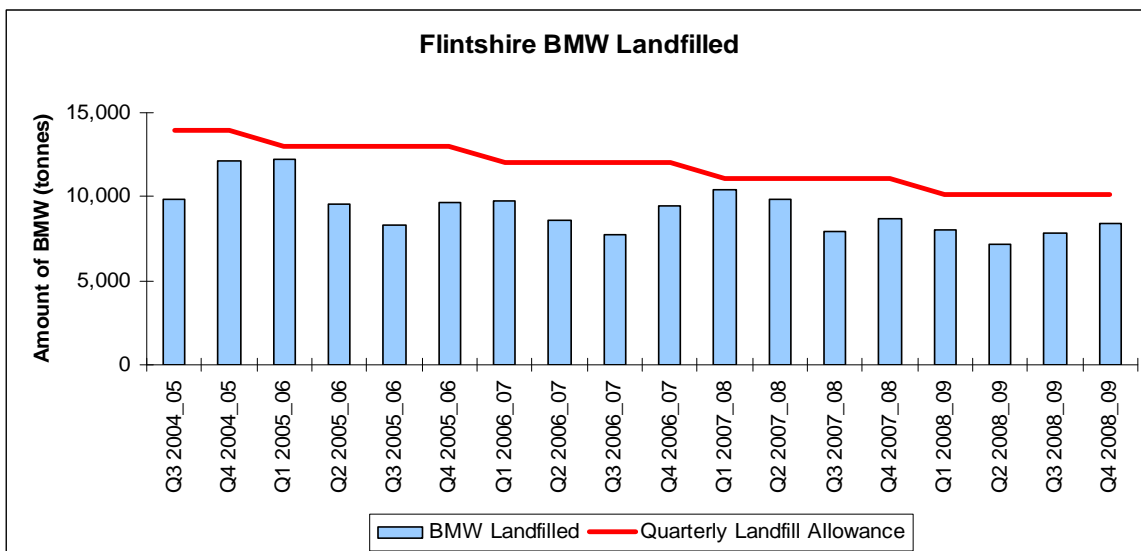
Waste Recycling Group Limited  
 (Shank Midlands Limited)  
 Pen-Y-Bont Landfill  
 Wrexham  
 LL14 3JE  
 (PPC No: GP3830BG)

**2008/ 2009 Allowance = 40367 tonnes**

Flintshire were 9035 tonnes (22.4%) within their allowance for 2007/8

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	7980	10091	-2111
2	7126	10092	-2966
3	7794	10092	-2298
4	8431	10092	-1661
<b>Total</b>	<b>31331</b>	<b>40367</b>	<b>-9035</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	13355	12907	5.4	-3.4
2	11901	12439	6.4	4.5
3	12435	12041	-3.5	-3.2
4	12560	12207	26.8	-2.8



# Gwynedd

## Landfill Sites Used

Cyngor Gwynedd Council  
Ffridd Rhasus Landfill Site  
Gwynedd  
LL40 2YB  
(EAWML/37293) no PPC No.

Cwmni Gwastraff Mon – Arfon  
Cyfyngedig  
Cilgwyn Landfill Site  
Gwynedd  
LL54 7SF  
(EAWML/37082) no PPC No.  
(CLOSED)

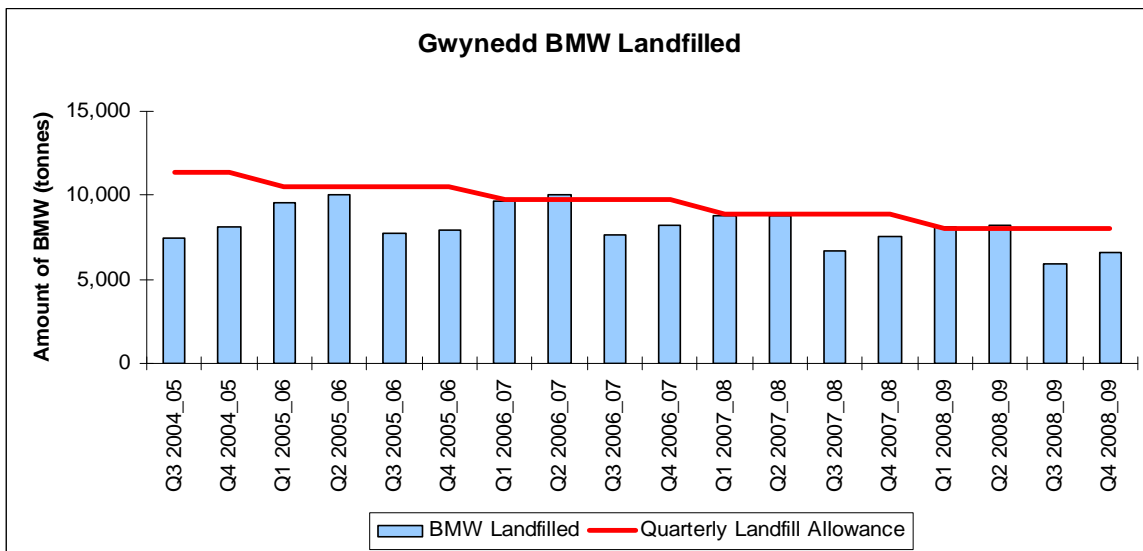
Cyngor Gwynedd Council  
Llwyn Isaf Landfill Site  
Gwynedd  
LL54 5DF  
(YP3538UJ)

**2008/ 2009 Allowance = 32229 tonnes**

Gwynedd were 3308 tonnes (10.3%) within their allowance

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	8107	8057	49
2	8239	8057	182
3	5939	8057	-2118
4	6636	8058	-1421
<b>Total</b>	<b>28921</b>	<b>32229</b>	<b>-3308</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	13689	13705	1.6	0.1
2	13848	13849	0.0	0.0
3	11643	11687	0.4	0.4
4	11182	11176	-4.6	0.0



# Isle of Anglesey

## Landfill Sites Used

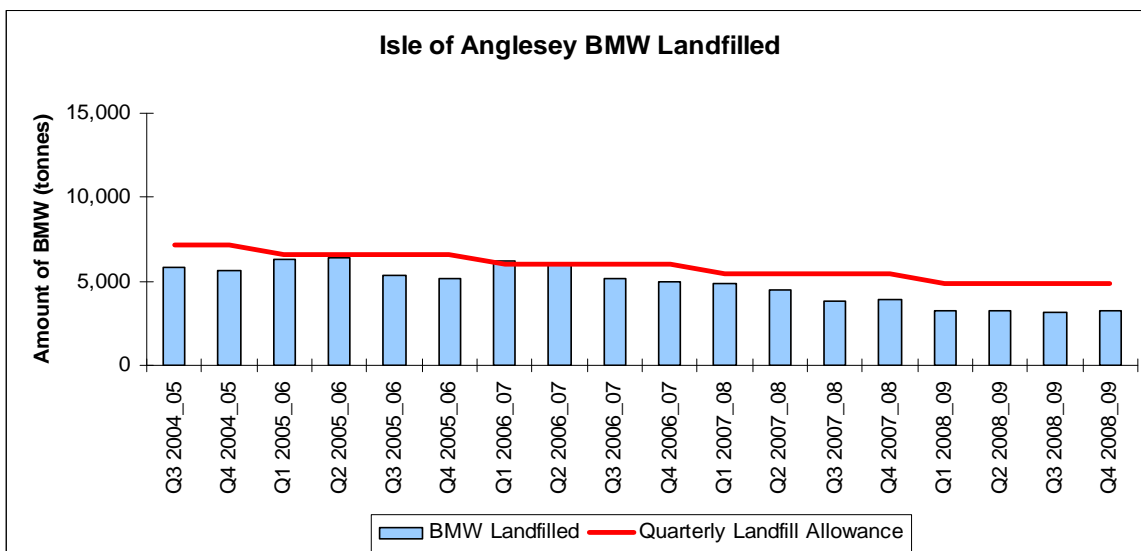
Waste Recycling Group Limited  
 (3 C Waste Management Ltd)  
 Llanddulas Landfill Site  
 Conwy  
 LL22 8HP  
 (PPC No. BU0800IZ)

**2008/ 2009 Allowance = 19563 tonnes**

Isle of Anglesey were 6698 tonnes (34.2%) within their allowance

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	3290	4890	-1600
2	3224	4891	-1667
3	3134	4891	-1757
4	3217	4891	-1674
<b>Total</b>	<b>12865</b>	<b>19563</b>	<b>-6698</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	6176	6176	0.0	0.0
2	6241	6241	0.0	0.0
3	5622	5622	0.0	0.0
4	5479	5474	0.0	-0.1



# Merthyr Tydfil

## Landfill Sites Used

Biffa Waste Services Ltd  
Trecatti Landfill Site  
CF48 4AB  
(PPC No. RP3733PC)

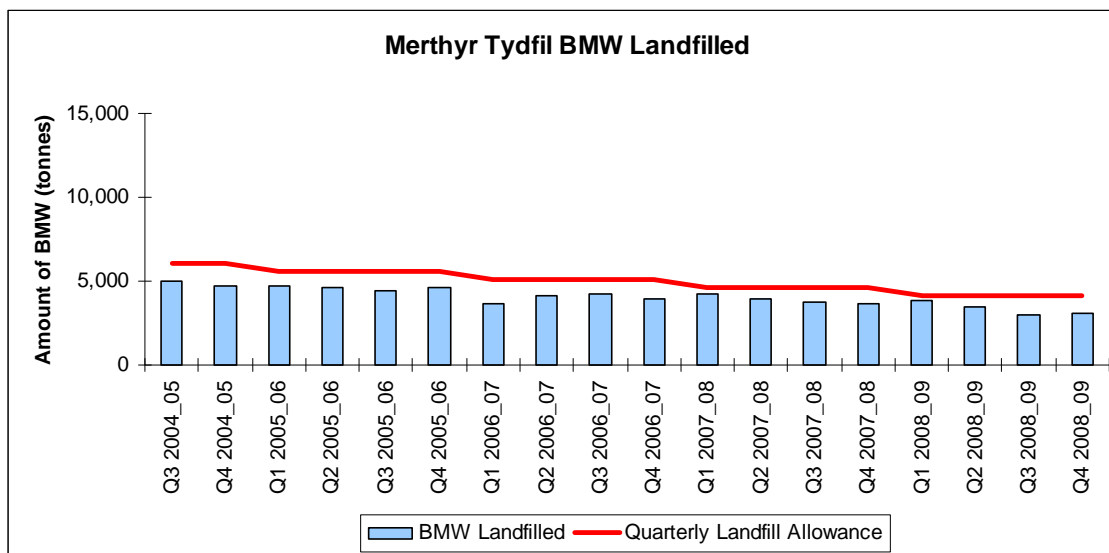
Cynon Valley Waste Disposal Co Ltd  
(Amgen Cymru Ltd)  
Bryn Pica Landfill Site  
CF44 0BX  
(PPC No. DP3732SQ)

**2008/ 2009 Allowance = 16672 tonnes**

Merthyr Tydfil were 3435 tonnes (20.6%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	3807	4168	-361
2	3418	4168	-750
3	2976	4168	-1192
4	3037	4168	-1131
<b>Total</b>	<b>13237</b>	<b>16672</b>	<b>-3435</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	6337	6109	- 3.6	- 3.6
2	5986	5986	6.2	0.0
3	5358	5717	6.8	6.7
4	5395	5775	7.0	7.0



# Monmouthshire

## Landfill Sites Used

Viridor Waste Management  
Sands Farm Landfill  
SN11 8TF  
(PPC No. BK6858ID)

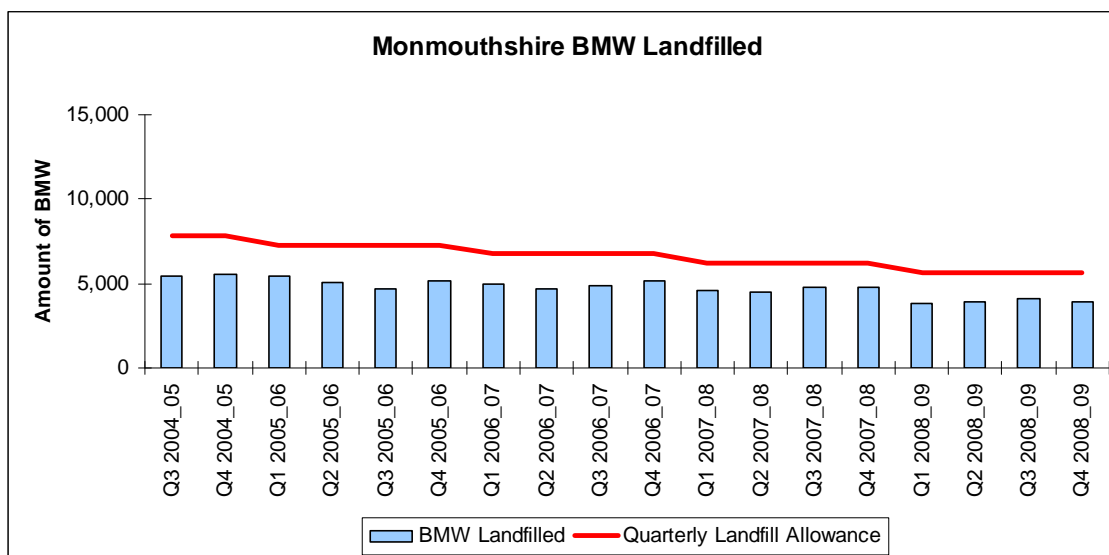
Silent Valley Waste Services  
Waunllwyd Landfill Site  
NP23 4TN  
(PPC No. MP3835SV)

**2008/ 2009 Allowance = 22631 tonnes**

Monmouthshire were 6825 tonnes (30.2%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	3847	5657	-1810
2	3953	5658	-1705
3	4062	5658	-1596
4	3943	5658	-1715
<b>Total</b>	<b>15806</b>	<b>22631</b>	<b>-6825</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	7859	8731	24.6	11.1
2	8008	8024	27.7	0.2
3	7372	6860	35.2	- 6.9
4	6914	7411	32.7	7.2



# Neath Port Talbot

## Landfill Sites Used

WRG Waste Services Ltd  
Pwllfawtkin Landfill Site  
Neath Port Talbot  
SA8 4RX  
(PPC No. BU8819IV)

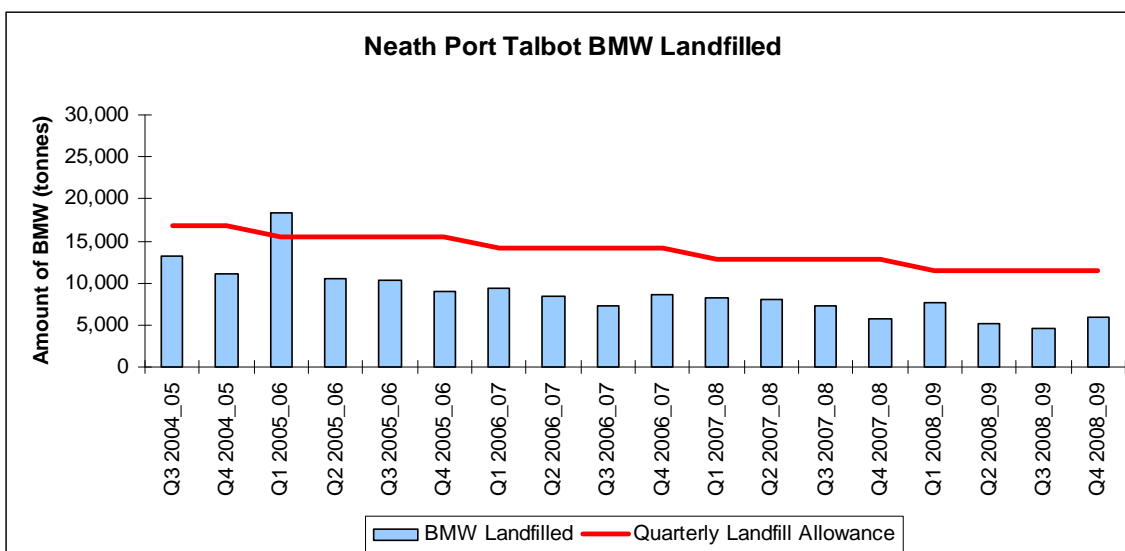
Neath Port Talbot (Recycling) Ltd  
Material Recovery & Energy Centre  
Swansea  
SA1 8PZ  
(PPC No. JP3632LD)

**2008/ 2009 Allowance = 45908 tonnes**

Neath Port Talbot were 22759 tonnes (49.6%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	7625	11477	-3852
2	5068	11477	-6409
3	4501	11477	-6976
4	5955	11477	-5522
<b>Total</b>	<b>23149</b>	<b>45908</b>	<b>22759</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	12313	12775	6.8	3.8
2	8758	8846	4.7	1.0
3	7671	7926	3.3	3.3
4	8057	8271	2.7	2.7



# Newport

## Landfill Sites Used

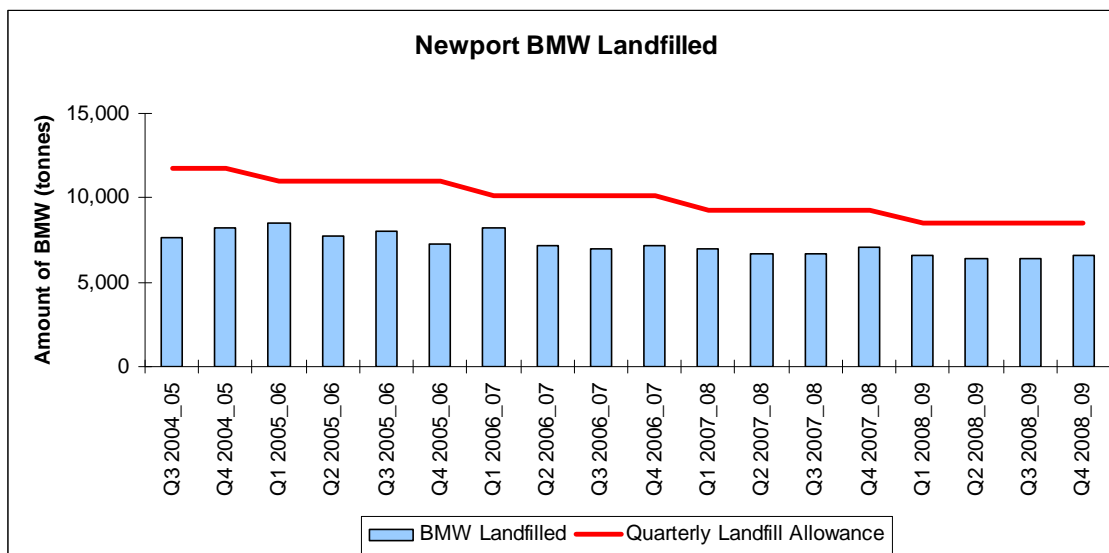
Newport City Council  
Docks Way Landfill Site  
NP20 2NS  
(PPC No. DP3733BK)

**2008/ 2009 Allowance = 33972 tonnes**

Newport were 8021 tonnes (23.6%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	6613	8493	-1880
2	6388	8493	-2105
3	6357	8493	-2136
4	6593	8493	-1900
<b>Total</b>	<b>25951</b>	<b>33972</b>	<b>-8021</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	11328	11245	- 0.7	- 0.7
2	11166	11404	2.1	2.1
3	10569	10677	1.0	1.0
4	10766	10245	- 4.8	- 4.8



# Pembrokeshire

## Landfill Sites Used

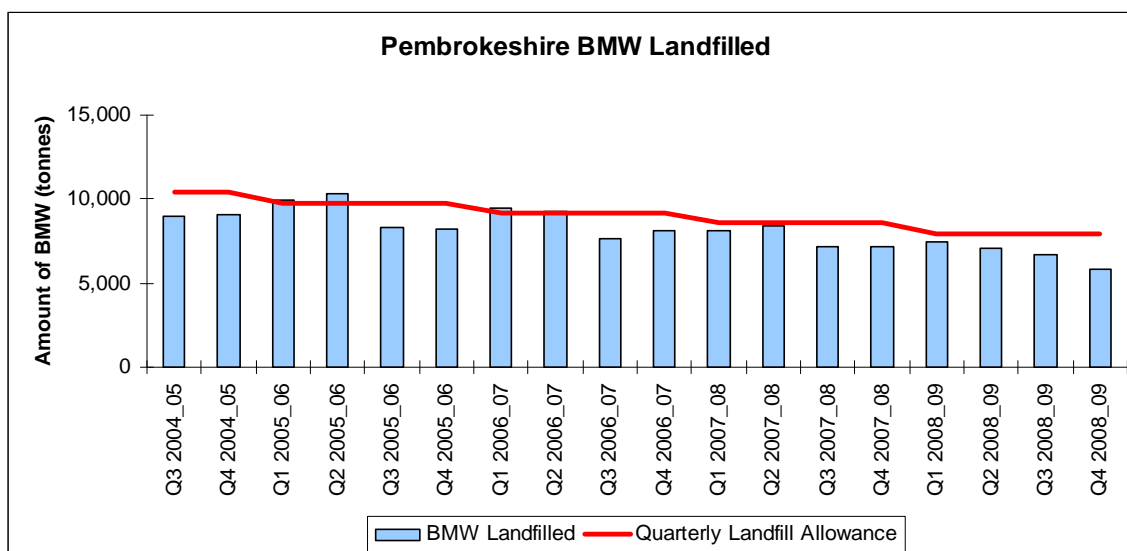
Resources Management (UK) Ltd  
 Withyhedge Landfill Site  
 Pembrokeshire  
 SA62 4DB  
 (PPC No. BP3131)

**2008/ 2009 Allowance = 31879 tonnes**

Pembrokeshire were 4849 tonnes (15.2%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	7404	7969	-565
2	7081	7969	-888
3	6675	7970	-1295
4	5869	7970	-2101
<b>Total</b>	<b>27030</b>	<b>31879</b>	<b>-4849</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	11439	11336	1.6	-0.9
2	11372	11227	-1.3	-1.3
3	10678	10708	-7.6	0.3
4	9674	9648	-2.3	-0.3



# Powys

## Landfill Sites Used

Sundorne Products (Llanidloes) Ltd  
(Potters Waste Management)  
Bryn Posteg Landfill Site  
SY18 6JJ  
(PPC No. BU77661C)

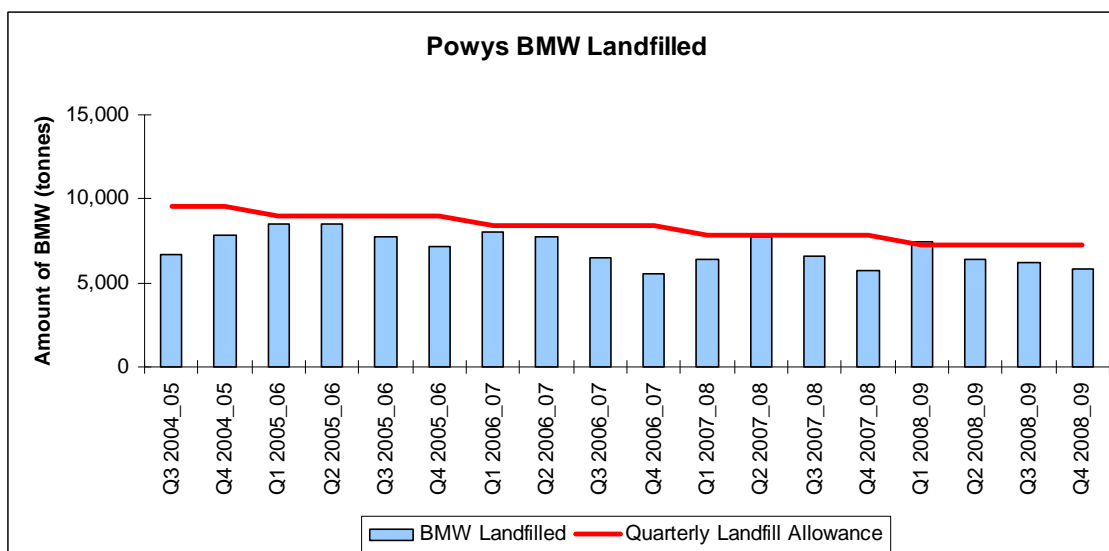
CWM Environmental Ltd  
Nantycaws Landfill Site  
SA32 8BG  
(PPC No. CP3735PB)

**2008/ 2009 Allowance = 29007 tonnes**

Powys were 3121 tonnes (10.8%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	7429	7251	178
2	6422	7252	-830
3	6178	7252	-1074
4	5857	7252	-1395
<b>Total</b>	<b>25886</b>	<b>29007</b>	<b>-3121</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	13253	13766	5.7	3.9
2	12553	12478	43.7	- 0.6
3	11622	11995	22.7	3.2
4	10918	11062	4.1	1.3



# Rhondda Cynon Taff

## Landfill Sites Used

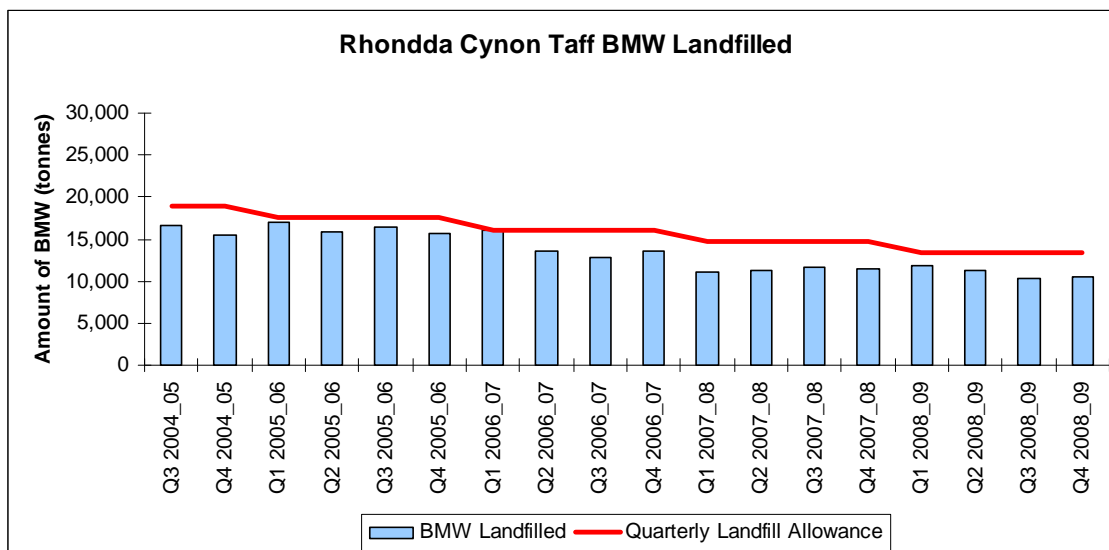
Cynon Valley Waste Disposal Company  
 Bryn Pica Landfill Site  
 CF44 0BX  
 (PPC No. DP3732SQ)

**2008/ 2009 Allowance = 53145 tonnes**

Rhondda Cynon Taff were 9247 tonnes (17.4%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	11794	13286	-1492
2	11294	13286	-1992
3	10284	13286	-3002
4	10526	13287	-2761
<b>Total</b>	<b>43898</b>	<b>53145</b>	<b>-9247</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	20535	20940	- 3.9	2.0
2	19524	20097	- 25.1	2.9
3	17755	18742	4.0	5.6
4	17827	19390	5.3	8.8



# Swansea

## Landfill Sites Used

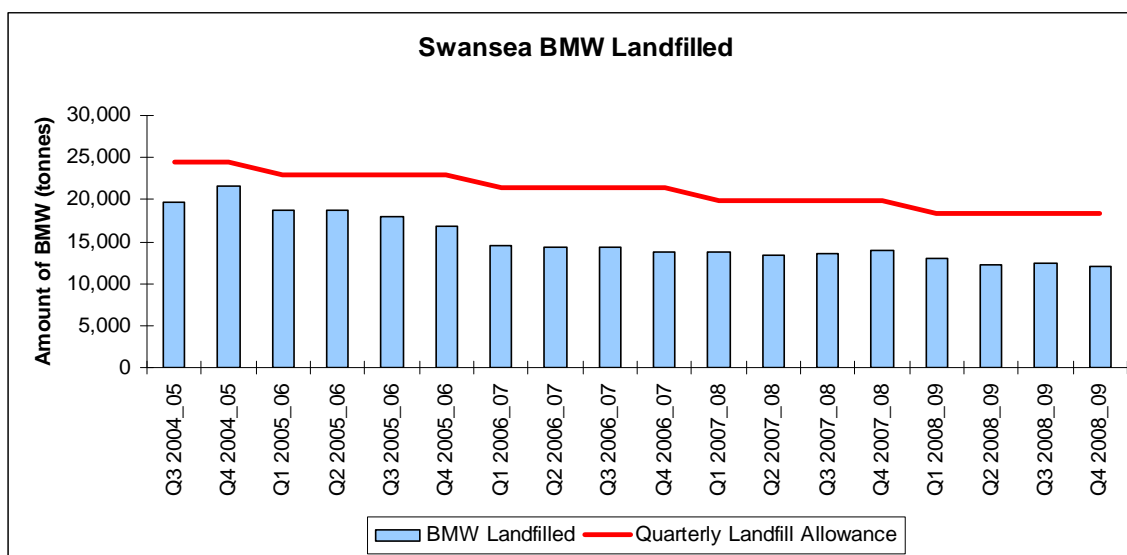
WRG Waste Services Ltd Pwllfawtkin Landfill Site Swansea SA8 4RX (PPC No. BU8819IV)	Cynon Valley Waste Disposal Company Bryn Pica Landfill Site (Amgen Cymru Ltd) Aberdare (PPC No. DP3732SQ)	CWM Environmental Ltd Nantycaws Landfill Site Carmarthen SA32 8BG (PPC No. CP3735PB)
Biffa Waste Services Trecatti Landfill Site Merthyr Tydfil CF48 4AB (PPC No. RP3733PC)	Resources Management (UK) Ltd Withyhedge Landfill Site Haverfordwest SA62 4DB (EAWML/34147)	

**2008/ 2009 Allowance = 73243 tonnes**

Swansea were 23481 tonnes (32.1%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	12942	18311	-5369
2	12316	18311	-5995
3	12453	18310	-5857
4	12051	18311	-6260
<b>Total</b>	<b>49762</b>	<b>73243</b>	<b>-23481</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	23330	23436	0.5	0.5
2	22789	23157	1.6	1.6
3	21519	22238	3.3	3.3
4	20609	22729	10.3	10.3



# Torfaen

## Landfill Sites Used

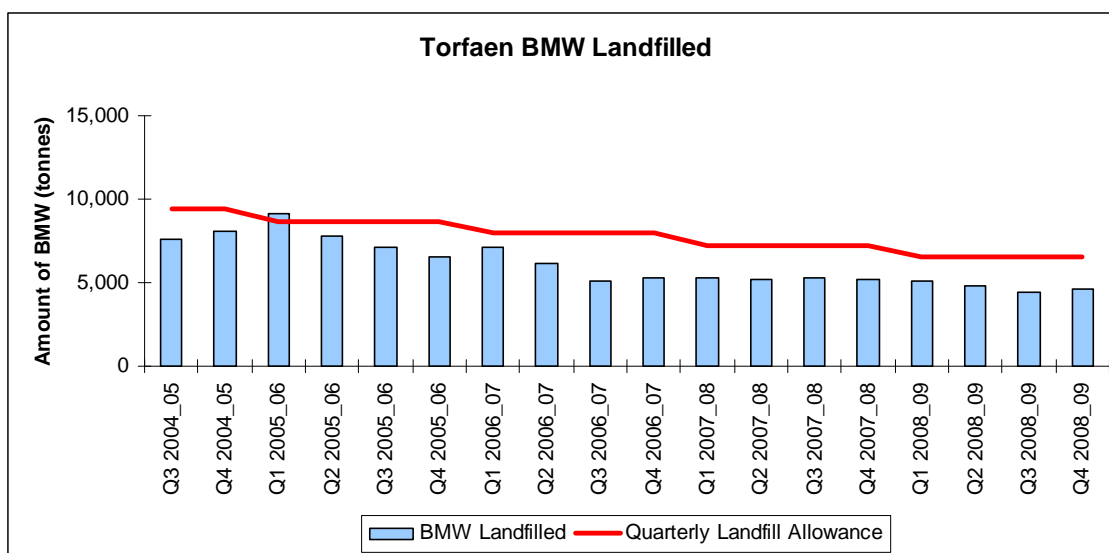
Viridor Waste Management  
Sands Farm Landfill  
SN11 8TF  
(PPC No. BK6858ID)

**2008/ 2009 Allowance = 26015 tonnes**

Torfaen were 7087 tonnes (27.2%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	5049	6503	-1454
2	4841	6504	-1663
3	4375	6504	-2129
4	4662	6504	-1842
<b>Total</b>	<b>18928</b>	<b>26015</b>	<b>-7087</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	7412	8291	11.9	11.9
2	7143	7021	12.1	- 1.7
3	6629	6695	12.7	1.0
4	6517	6532	12.6	0.2



# Vale of Glamorgan

## Landfill Sites Used

Biffa Waste Services  
Trecatti Landfill Site  
CF48 4AB  
(PPC No. RP3733PC)

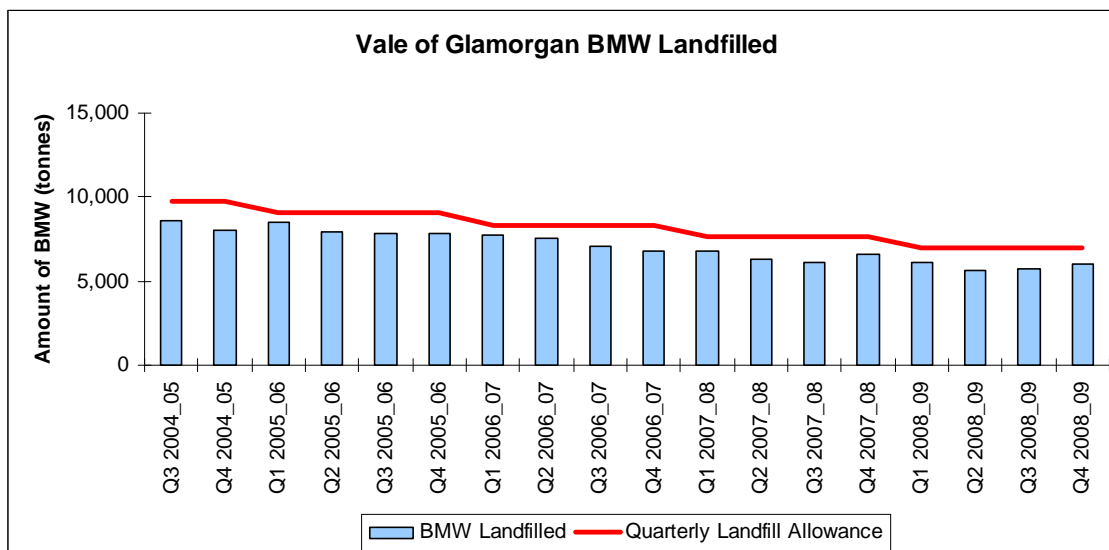
WRG Waste Services Ltd  
Pwllfawtkin Landfill Site  
SA8 4RX  
(PPC No. BU8819IV)

**2008/ 2009 Allowance = 27931 tonnes**

Vale of Glamorgan were 4446 tonnes (15.9%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	6137	6982	-845
2	5662	6983	-1321
3	5702	6983	-1281
4	5984	6983	-999
<b>Total</b>	<b>23485</b>	<b>27931</b>	<b>-4446</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	10141	10140	37.4	0.0
2	10046	10037	18.4	- 0.1
3	9728	10193	4.8	4.8
4	10033	9510	16.6	- 5.2



# Wrexham

## Landfill Sites Used

Waste Recycling Group Limited  
(Shank Midlands Limited)  
Pen-Y-Bont Landfill  
Wrexham  
LL14 3JE  
(PPC No: GP3830BG)

Tudor Griffiths Transport Ltd  
Wood Lane Landfill Site  
Ellesmere  
Shropshire  
SY120HY  
(EAWML/47038)

**2008/ 2009 Allowance = 37047 tonnes**

Wrexham were 7573 (20.4%) within their allowance for 2008/9

Quarter	BMW Landfilled (tonnes)	2008/ 2009 LAS Allowance (tonnes)	Difference between amount of BMW Landfilled and Landfill Allowance (tonnes)
1	7061	9261	-2200
2	7281	9262	-1981
3	7313	9262	-1949
4	7819	9262	-1443
<b>Total</b>	<b>29475</b>	<b>37047</b>	<b>-7573</b>

Quarter	WDF Landfill Tonnage Post Validation (tonnes)	Estimated Site Returns Post Validation (tonnes)	Original Discrepancy between WDF and Site Returns (%)	Difference between WDF & Site Returns Post Validation (%)
1	11617	10912	-6.1	-6.1
2	11850	11151	-5.9	-5.9
3	11884	11280	-8.2	-5.1
4	11856	11931	0.6	0.6

