

# **North Wales Regional Waste Group**

## **Annual Monitoring Report**

**April 2006**



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## 1. Introduction

- 1.1 This is the second Annual Monitoring Report relating to the North Wales Regional Waste Plan (the RWP).

## 1.2 Regional Waste Planning

- 1.2.1 The Welsh Assembly Government has given the responsibility of preparing, monitoring and revising the RWP to the North Wales Waste Group. This group is led by a Steering Group of Councillors from the 7 local planning authorities in the region with a Technical Group of officers from local government, the Welsh Assembly Government, Environment Agency Wales and other government bodies, and representatives from the waste industry and environmental groups.
- 1.2.2 The RWP is a land-use planning framework to inform the planning and controlling the development of an integrated network of facilities to recover, treat and dispose of waste in North Wales in a way which will satisfy modern environmental standards and meet the targets set by European and national legislation.
- 1.2.3 The first RWP was agreed by the Regional Members Group (RMG), endorsed by all of the local authorities in the region during March 2004.

## 1.3 Annual Monitoring Reports

- 1.3.1 The North Wales Waste Group will be publishing a revised RWP in March 2007. Central to the process of preparing the revised RWP will be the collection and analysis of information regarding the implementation of the RWP and the waste situation within the region. This information is required to be published in Annual Monitoring Reports in March 2005, 2006 and 2007.
- 1.3.2 **Information on the implementation of the RWP** is required in order to monitor-
- how well or badly the RWP is performing against targets
  - what changes/corrections are needed to put the plan back on course or revise the plan
  - each Local Authority's progress in adopting waste policies in development plans and Supplementary Planning Guidance which take the RWP into account.
- 1.3.3 Planning Policy Wales Technical Advice Note (TAN) 21 states that development plans "*will be required to ensure there is adequate provision for the facilities in accordance with the RWP*" (Para 2.6)<sup>1</sup> and each local authority should include in its development plan "*elements of the agreed regional plan that are germane to its area...If UDPs are at an advanced stage supplementary planning guidance can be issued or an early review of the UDP be undertaken to ensure that the requirements of Article 7 of the Waste Framework Directive are complied with. In some cases, it may be necessary to amend a UDP at a fairly late stage*" (Para 2.12)<sup>2</sup>. These requirements were underlined, and suggested minimum policy set out, in the Policy Clarification note 'Unitary Development Plans - Waste Policies, Hazardous Waste Planning Applications' issued by the Welsh Assembly Government (WAG) on 28 May 2004.
- 1.3.4 **Information on the waste situation within the region** is required in order to monitor the region's waste arisings, recovery and disposal. The challenge of planning for waste management and resource recovery facilities must be undertaken with a sound information base; it is therefore important to have comprehensive, accurate, timely, and consistent information.

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<sup>1</sup> *Planning Policy Wales Technical Advice Note (Wales) 21: Waste.* WAG (2001).

<sup>2</sup> *Planning Policy Wales Technical Advice Note (Wales) 21: Waste.* WAG (2001).

## **1.4 The First Annual Monitoring Report**

- 1.4.1 The time allowed for the production of the first Annual Monitoring Report, as well as the data available, did not give scope for meeting the full requirements of the WAG. A 'slimmed down' version was produced, enabling both the monitoring of the most important headline data and a later deadline to be met. It was intended that this Annual Monitoring Report, and subsequent Reports, would be more comprehensive and meet the full requirements.

## **1.5 The Second Annual Monitoring Report**

- 1.5.1 As highlighted in para 1.4.1, this, the second Annual Monitoring Report is intended to provide more comprehensive coverage of the waste arisings and management as identified by WAG.
- 1.5.2 Due to the limited time and data available to prepare the first Annual Monitoring Report, progress was measured against the targets set out in the National Waste Strategy for Wales 'Wise about Waste'. The second Annual Monitoring Report follows a similar format in order to facilitate direct comparison but also includes the WAG contract requirements for monitoring, where this information is available.
- 1.5.3 Another requirement of the WAG contract is that forecasts are made for all controlled wastes and this will provide the basis for the reviewed RWP. Forecasts have been made for each controlled waste stream and are included within this document.
- 1.5.4 The AMR is divided into two distinct elements:
- Monitoring the regions' waste: all controlled wastes by sector/and specific types of waste (demand), and
  - Monitoring the regions' waste management facilities (capacity).

## 2. Monitoring the Region's Waste

### 2.1 Context

- 2.1.1 The RWP was prepared in the context provided by the National Waste Strategy for Wales<sup>3</sup> (the NWSW) which in turn reflects the principles and requirements of both the UK Government and European Union directives.
- 2.1.2 Due to the limited time available for preparation, the first Annual Monitoring Report only measured progress against the 12 targets set out in the NWSW. This second AMR however, aims to provide information on all controlled wastes. Progress against the NWSW targets is also included to facilitate comparison between the first and second AMRs and to meet contract requirements where applicable.
- 2.1.3 There are 12 NWSW targets that can be divided into two categories which are dealt with in turn below:
- Targets for minimising waste arisings
  - Targets for waste management and resource recovery
- 2.1.4 Each of the controlled wastes and targets are discussed below by:
- Detailing the target (where applicable)
  - Presenting available monitoring data
  - Presenting a commentary
  - Identifying any implications or actions arising.
- 2.1.5 Where possible/available, data has been presented for all years and broken down to LA level in order facilitate a comprehensive understanding of the region's performance over time and over LA area.
- 2.1.6 The North Wales RWP area includes North Powys which comprises the former Montgomeryshire area but excludes the former Radnor and Brecon areas (which are covered by the South East Region). It has been agreed (WAG and the 2 regions concerned) for the purposes of this exercise that all the data for Powys will be split 50/50 between the NW and SE Wales RWP areas.

### 2.2 Municipal Solid Waste (MSW)

#### Current Arisings of MSW

NWSW Target
Stabilisation and reduction of household waste: <ul style="list-style-type: none"><li>• By 2009/10 (and to apply beyond) waste arisings per household should be no greater than those (for Wales) in 1997/98;</li><li>• By 2020 waste arisings per person should be less than 300kg per annum.</li></ul>

<sup>3</sup> *Wise about Waste: The National Waste Strategy for Wales*. WAG (2002).

**Table 1: Household Waste Arisings per Household (Kg)<sup>4 5</sup>**

AUTHORITY	1997 / 98 <sup>6 7</sup>	1998 / 99 <sup>8</sup>	1999 / 2000 <sup>9</sup>	2000 / 01 <sup>10</sup>	2001 / 02 <sup>11</sup>	2002 / 03 <sup>12</sup>	2003 / 04 <sup>13</sup>	2004 / 05 <sup>14</sup>
Denbighshire	891	890	997	1,044	1,144	1,238	1,189	1,071
Wrexham	1,120	1,201	1,464	1,287	1,318	1,378	1,322	1,203
Flintshire	DNA	1,272	1,383	1,361	1,416	1,391	1,405	1,144
Conwy	DNA	1,010	1,471	1,235	1,452	1,326	1,291	1,114
Gwynedd	1,045	1,098	1,161	1,203	1,251	1,247	1,195	1,222
Anglesey	1,357	1,449	1,421	1,517	1,451	1,370	1,369	1,256
Powys (North)	802	828	863	937	975	1,044	1,148	837
<b>N WALES</b>	<b>1,010</b>	<b>1,095</b>	<b>1,216</b>	<b>1,214</b>	<b>1,280</b>	<b>1,301</b>	<b>1,274</b>	<b>1,271</b>

**Table 2: Household Waste Arisings per Person (Kg)<sup>15 16</sup>**

AUTHORITY	1998 / 99 <sup>17</sup>	1999 / 2000 <sup>18</sup>	2000 / 01 <sup>19</sup>	2001 / 02 <sup>20</sup>	2002 / 03 <sup>21</sup>	2003 / 04 <sup>22</sup>	2004 / 05 <sup>23</sup>
Denbighshire	382	427	448	491	530	510	459
Wrexham	497	521	533	546	571	548	498
Flintshire	518	564	555	577	567	572	466
Conwy	443	645	542	637	581	566	507
Gwynedd	463	489	507	527	525	503	515
Anglesey	615	603	644	615	582	581	533
Powys (North)	353	368	399	416	445	490	357
<b>N WALES</b>	<b>462</b>	<b>513</b>	<b>512</b>	<b>540</b>	<b>549</b>	<b>537</b>	<b>539</b>

2.2.1 Figures 1 and 2 show an overall upward trend in the region's household Waste arisings per person and per household. Household arisings per household have increased by 25.8 % between 1998/99 to 2004/2005, while arisings per person have increased by 16.7%. While the target years are still 5-15 years away the current trends are in the wrong direction ie growth away from the target figures rather than reduction towards meeting. This in effect is a greater

<sup>4</sup> Data excludes Abandoned Vehicles.

<sup>5</sup> Based on Number of Households from 2001 Census.

<sup>6</sup> Wales Average Household Waste Arisings 1997/98. Supplied by WAG Waste Strategy Unit.

<sup>7</sup> DNA = Data Not Available.

<sup>8</sup> Tables A3(A) & A3(B). *Municipal Waste Management Survey 2000/01*. WAG (2003).

<sup>9</sup> Tables A2(A) & A2(B). *Municipal Waste Management Survey 2000/01*. WAG (2003).

<sup>10</sup> Tables A2(A) & A2(B). *Municipal Waste Management Survey 2001/02*. WAG (2003).

<sup>11</sup> Tables 3.2(A) & 3.2 (B). *Municipal Waste Management Survey 2001/02*. WAG (2003).

<sup>12</sup> Data supplied by WAG Waste Strategy Unit.

<sup>13</sup> Data supplied by WAG Waste Strategy Unit.

<sup>14</sup> Data supplied by WAG Waste Strategy Unit.

<sup>15</sup> Data excludes Abandoned Vehicles.

<sup>16</sup> Based on Population figures from 2001 Census.

<sup>17</sup> Tables A3(A) & A3(B). *Municipal Waste Management Survey 2000/01*. WAG (2003).

<sup>18</sup> Tables A2(A) & A2(B). *Municipal Waste Management Survey 2000/01*. WAG (2003).

<sup>19</sup> Tables A2(A) & A2(B). *Municipal Waste Management Survey 2001/02*. WAG (2003).

<sup>20</sup> Tables 3.2(A) & 3.2(B). *Municipal Waste Management Survey 2001/02*. WAG (2003).

<sup>21</sup> Data supplied by WAG Waste Strategy Unit.

<sup>22</sup> Data supplied by WAG Waste Strategy Unit.

<sup>23</sup> Data supplied by WAG Waste Strategy Unit.

turnaround %. Instead of increasing by approx 1.5 % per year it should be decreasing by 1.5% per year i.e. a turnaround of over 3% per year.

### **Forecast Arisings of MSW**

2.2.2 The following forecasts were considered in the Stage 1 Regional Waste Assessment 2003. The forecast highlighted was used:

- A **'High Growth' scenario**, based on average MSW growth figures for the North Wales Region of 3.8%.
- A **'Medium Growth' scenario**. *Whilst this reflects compound growth over a 20 year period of nearly 2.2% per annum, the rate of waste growth varies and can be summarised as follows:*
  - *Until 2006 - Growth averaging 3.8% per annum*
  - *From 2007 to 2015 - A declining growth averaging 1.7% per annum*
  - *From 2016 to 2021 - Zero waste growth.*
- A **'Low Growth' scenario**. Represented by 1% per annum growth to the year 2021.
- A **'Waste Strategy' scenario**. This scenario has been developed to meet the 2020 household waste (secondary) target set within the National Waste Strategy for Wales, of achieving less than 300kg per person per year. This scenario is represented by a compound growth rate over 20 years of approximately -1.9%.

**Table 3: Average Annual Changes in Municipal Waste Arisings in North Wales**

Change in arisings 98/99 – 99/00	Average annual change in arisings 98/99 – 00/01	Average annual change in arisings 98/99 – 01/02	Average annual change in arisings 98/99 – 02/03	Average annual change in arisings 98/99 – 03/04	Average annual change in arisings 98/99 – 04/05
4.6%	5.7%	4.6%	4.5%	3.8%	4.1%

2.2.3 Table 3 shows the average annual changes calculated from the first year for which complete data was available to each subsequent year. It can be seen when averaged out over the increasing number of years the changes in arisings are fairly close to the growth forecast used for the first RWP.

2.2.4 Based upon the current level of growth in arisings being greater than the forecasts used in the first RWP, and taking into account future increases in population, the following forecast will be used as the basis for the RWP review:

<b>2005/06 to 2014/15</b>
+ 4% per annum

## Current Management of MSW

NWSW Target
<p>Minimum recycling and composting targets for each local authority to deliver:</p> <ul style="list-style-type: none"> <li>• By 2003/04 achieve at least 15% recycling/composting of municipal waste with a minimum of 5% composting (with only compost derived from source segregated materials counting) and 5% recycling;</li> <li>• By 2006/07 achieve at least 25% recycling/composting of municipal waste with a minimum of 10% composting (with only compost derived from source segregated materials counting) and 10% recycling;</li> <li>• By 2009/10 achieve at least 40% recycling/composting of municipal waste with a minimum of 15% composting (with only compost derived from source segregated materials counting) and 15% recycling.</li> </ul>

**Table 4: Municipal Waste Recycled (% of arisings)<sup>24 25</sup>**

AUTHORITY	1998/99	1999/00	2000/01	2001/02	2002/03 <sup>26</sup>	2003/04 <sup>27</sup>	2004/05 <sup>28</sup>
Denbighshire	DNA	DNA	DNA	DNA	7.2	10.4	14.3
Wrexham	DNA	DNA	DNA	DNA	6.2	6.8	7.8
Flintshire	DNA	DNA	DNA	DNA	14.1	16.7	14.1
Conwy	DNA	DNA	DNA	DNA	9.3	12.1	10.4
Gwynedd	DNA	DNA	DNA	DNA	12.1	11.9	13.7
Anglesey	DNA	DNA	DNA	DNA	7.4	10	11
Powys (North)	DNA	DNA	DNA	DNA	15.6	18.8	17.6
<b>N WALES</b>	<b>DNA</b>	<b>DNA</b>	<b>DNA</b>	<b>DNA</b>	<b>10.2</b>	<b>12.2</b>	<b>12.4</b>

**Table 5: Municipal Waste Composted (% of arisings)<sup>29</sup>**

AUTHORITY	1998/99	1999/00	2000/01	2001/02	2002/03 <sup>30</sup>	2003/04 <sup>31</sup>	2004/05 <sup>32</sup>
Denbighshire	DNA	DNA	DNA	DNA	4	6	6.1
Wrexham	DNA	DNA	DNA	DNA	3.8	4.5	6.1
Flintshire	DNA	DNA	DNA	DNA	4.3	5.6	7.6
Conwy	DNA	DNA	DNA	DNA	7.1	8.5	8.7
Gwynedd	DNA	DNA	DNA	DNA	0.3	5.8	9.1
Anglesey	DNA	DNA	DNA	DNA	4.2	5.5	6.2
Powys (North)	DNA	DNA	DNA	DNA	5.4	11.4	15.7
<b>N WALES</b>	<b>DNA</b>	<b>DNA</b>	<b>DNA</b>	<b>DNA</b>	<b>4.1</b>	<b>6.4</b>	<b>8.3</b>

<sup>24</sup> Data excludes Abandoned Vehicles.

<sup>25</sup> DNA = Data Not Available.

<sup>26</sup> Data supplied by WAG Waste Strategy Unit.

<sup>27</sup> Data supplied by WAG Waste Strategy Unit.

<sup>28</sup> Data supplied by WAG Waste Strategy Unit.

<sup>29</sup> DNA = Data Not Available.

<sup>30</sup> Data supplied by WAG Waste Strategy Unit.

<sup>31</sup> Data supplied by WAG Waste Strategy Unit.

<sup>32</sup> Data supplied by WAG Waste Strategy Unit.

**Table 6: Municipal Waste Recycled & Composted (% of arisings)<sup>33</sup>**

<b>AUTHORITY</b>	<b>1998 / 99<sup>34</sup></b>	<b>1999 / 00<sup>35</sup></b>	<b>2000 / 01<sup>36</sup></b>	<b>2001 / 02<sup>37</sup></b>	<b>2002 / 03<sup>38</sup></b>	<b>2003 / 04<sup>39</sup></b>	<b>2004 / 05<sup>40</sup></b>
Denbighshire	3.6	5	5.6	4.1	11.2	16.4	20.4
Wrexham	2.5	2.5	2	3.1	10	11.3	13.9
Flintshire	5.8	5.9	6.6	8.5	18.4	22.3	21.6
Conwy	15	21.9	24.7	18.4	16.4	20.6	19.1
Gwynedd	4.5	5.1	5.2	6.7	12.4	17.7	22.8
Anglesey	2.6	2.4	3	2.6	11.6	15.5	17.2
Powys (North)	7.7	8.1	8.6	16.9	21	30.1	33.3
<b>N WALES</b>	<b>5.9</b>	<b>8.1</b>	<b>8.6</b>	<b>8.6</b>	<b>14.3</b>	<b>18.6</b>	<b>20.7</b>

2.2.5 Having already met and surpassed 2003/04 targets for the recycling and composting of municipal waste, the data set out in Tables 4 to 6 above show that the region is continuing to achieve the progress required in order to meet the 25% target in 2006/06.

2.2.6 At the Local Authority level, it can be seen that each authority (except Wrexham) is already achieving the 10% 2006.07 recycling target. However, a significant increase in composting levels will be required in each authority to achieve the 10% 2006/07 composting target (with the exception of Powys).

<b>NWSW Target: Landfilling of Biodegradable Municipal Waste</b>
<p>Targets to limit the amount of biodegradable municipal waste (BMW) landfilled:</p> <ul style="list-style-type: none"> <li>• By 2010 no more than 75% of the BMW produced in 1995 can be landfilled;</li> <li>• By 2013 no more than 50% of the BMW produced in 1995 can be landfilled;</li> <li>• By 2020 no more than 35% of the BMW produced in 1995 can be landfilled.</li> </ul>

<sup>33</sup> Data excludes Abandoned Vehicles.

<sup>34</sup> Tables A3(A) & A3(B). *Municipal Waste Management Survey 2000/01*. WAG (2003).

<sup>35</sup> Tables A2(A) & A2(B). *Municipal Waste Management Survey 2000/01*. WAG (2003).

<sup>36</sup> Tables A2(A) & A3(B). *Municipal Waste Management Survey 2001/02*. WAG (2003).

<sup>37</sup> Tables 3.2(A) & 3.2(B). *Municipal Waste Management Survey 2001/02*. WAG (2003).

<sup>38</sup> Data supplied by WAG Waste Strategy Unit.

<sup>39</sup> Data supplied by WAG Waste Strategy Unit.

<sup>40</sup> Data supplied by WAG Waste Strategy Unit.

**Table 7: Landfilled Biodegradable Municipal Waste (tonnes)<sup>41 42</sup>**

AUTHORITY	1995 est. <sup>43</sup>	1998-2002	2002/03 <sup>44</sup>	2003/04 <sup>45</sup>	2004/05 <sup>46</sup>	04/05 Allowance	2010 Allowance
Denbighshire	26,363	DNA	26,243	22,124	13,613	15,798	19,456
Wrexham	45,730	DNA	39,278	37,978	19,983	26,942	32,837
Flintshire	49,820	DNA	40,576	37,016	21,975	27,953	36,482
Conwy	44,586	DNA	31,373	27,071	18,006	23,755	34,300
Gwynedd	37,802	DNA	37,673	28,701	15,615	22,681	28,945
Anglesey	23,580	DNA	22,323	21,222	11,492	14,270	17,319
Powys (North)	16,999	DNA	16,323	16,455	7,299	9,525	13,367
<b>N WALES</b>	<b>244,880</b>	<b>DNA</b>	<b>213,789</b>	<b>190,567</b>	<b>107,983</b>	<b>140,924</b>	<b>182,706</b>

2.2.7 The Landfill Allowance Scheme sets the maximum amount of waste that may be sent to landfill in target years (2010, 2013 and 2020). The WAG has allocated landfill allowances to Welsh Waste Disposal Authorities from 2004.05 until 2009/10 in advance of the start of the first scheme year on 1<sup>st</sup> October 2004.

2.2.8 Table 7 shows the results for 2004/05, which is the first year of the LAS in Wales (using 6 months of data). This indicates the final position in relation to each authority and the region.

2.2.9 The results show that for the 2004/05 Scheme Year all authorities in North Wales achieved their respective landfill allowance.

## 2.3 Industrial & Commercial Waste (I&C Waste)

### Current Arisings of I&C Waste

<b>NWSW Target: Public Body Waste Arisings</b>
Public bodies to reduce their own waste arisings: <ul style="list-style-type: none"> <li>• By 2005, achieve a reduction in waste produced equivalent to at least 5% of the 1998 arisings figure;</li> <li>• By 2010, achieve a reduction in waste produced equivalent to at least 10% of the 1998 arisings figure.</li> </ul>

<b>NWSW Target: Business Waste Arisings</b>
The Assembly Government encourages businesses to join in with the public sector to meet, and exceed where possible, the following waste minimisation targets: <ul style="list-style-type: none"> <li>• By 2005, achieve a reduction in waste produced equivalent to at least 5% of the 1998 arisings figure;</li> <li>• By 2010, achieve a reduction in waste produced equivalent to at least 10% of the 1998 arisings figure.</li> </ul>

<sup>41</sup> Data excludes Abandoned Vehicles.

<sup>42</sup> DNA = Data Not Available.

<sup>43</sup> Based on forecasts used in North Wales Regional Waste Plan. Assumes 61% BMW content.

<sup>44</sup> Estimated using Environment Agency's 'BMW Ready Reckoner'. Oil not included.

<sup>45</sup> Estimated using Environment Agency's 'BMW Ready Reckoner'. Oil not included.

<sup>46</sup> Data supplied by Environment Agency Wales.

**Table 8: Industrial Waste Arisings by Local Authority (tonnes)**

Authority	1998/99 <sup>47</sup>	1999/2000	2000/2001	2001/2002	2002/2003 <sup>48</sup>
Denbighshire	41,600	DNA	DNA	DNA	44,700
Wrexham	213,000	DNA	DNA	DNA	234,600
Flintshire	258,000	DNA	DNA	DNA	185,200
Conwy	30,700	DNA	DNA	DNA	11,300
Gwynedd	61,100	DNA	DNA	DNA	30,900
Anglesey	60,900	DNA	DNA	DNA	45,200
Powys (North)	27,229	DNA	DNA	DNA	29,200
<b>N Wales</b>	<b>692,529</b>	<b>DNA</b>	<b>DNA</b>	<b>DNA</b>	<b>581,100</b>

**Table 9: Commercial Waste Arisings by Local Authority (tonnes)**

Authority	1998/99 <sup>49</sup>	1999/2000	2000/2001	2001/2002	2002/2003 <sup>50</sup>
Denbighshire	39,200	DNA	DNA	DNA	40,400
Wrexham	45,600	DNA	DNA	DNA	43,700
Flintshire	52,500	DNA	DNA	DNA	47,900
Conwy	52,000	DNA	DNA	DNA	46,600
Gwynedd	55,800	DNA	DNA	DNA	47,000
Anglesey	21,800	DNA	DNA	DNA	22,800
Powys (North)	16,751	DNA	DNA	DNA	31,600
<b>North Wales</b>	<b>283,651</b>	<b>DNA</b>	<b>DNA</b>	<b>DNA</b>	<b>280,000</b>

- 2.3.1 A survey of I&C waste has recently been completed for Wales for the year 2002/03. The survey was conducted on behalf of the EA (Wales) and was primarily funded from the landfill tax credit scheme operated under the Biffaward scheme and also by the EA.
- 2.3.2 2,100 companies across Wales were asked for information representing roughly 3% of businesses in Wales. A sampling methodology was developed with the population of companies' details provided by the Office of National Statistics (ONS) which enabled the survey data to be 'grossed up' to produce estimates of total I&C arisings. This is the same basic statistical approach used in the first survey in 1998/99 in order for comparisons to be made.
- 2.3.3 The data provided in Tables 8 and 9 above present a comparison in I&C waste arisings between the two survey years. The data shows a regional decline in both industrial and commercial arisings by 16.1% and 1.3% respectively. In the period between the two survey years, industrial waste arisings has declined at an average of 4% per year and commercial arisings has declined at an average of 0.3% per year.
- 2.3.4 As the 1998/99 public sector arisings figure is not available however, it is currently not possible to establish the regions' progress against the public body arising target. For Wales, the survey has indicated that between 1998/99 and 2003, public sector waste arisings have reduced by 41%. However, the response rate from the sample of public sector bodies was poor, and as a result, the total for 2003 is deemed to be low compared to the previous survey. Indications are that the sector has not reduced its waste arisings. The WAG has therefore commenced a public sector waste minimisation campaign to address the issue.
- 2.3.5 Currently, the public sector arisings figure for the North Wales region in 2002/03 is given as 3,900 tonnes.
- 2.3.6 With regard to the regions' progress against the business waste targets, currently business waste arisings would be included as elements of both I&C waste and also municipal waste, where this is collected by the Local Authority under it's duties as a waste collection authority.

<sup>47</sup> Environment Agency, I&C Arisings for Wales for 1998/99.

<sup>48</sup> Environment Agency, I&C Waste Survey 2003.

<sup>49</sup> Environment Agency, I&C Arisings for Wales for 1998/99.

<sup>50</sup> Environment Agency, I&C Waste Survey 2003.

As such, extracting the specific ‘business’ elements from these waste streams would not be possible.

### **Forecast Arisings of I&C Waste**

2.3.8 The following forecasts were considered in the Stage 1 Regional Waste Assessment 2003. The forecasts highlighted were used:

#### **Industrial Waste:**

- A ‘**High Growth**’ scenario. Represented by 2.0% per annum growth to the year 2021.
- A ‘**Declining Growth**’ scenario. Average compound growth over a 20 year period is approximately –1.22% per annum, effectively replicating the MSW ‘Medium Growth’ scenario. The rate of waste growth varies over the 20 year period and can be summarised as follows:
  - To the year 2006 - Growth averaging 3.8% per annum;
  - 2007- 2015 - A reduced growth averaging 1.7% per annum;
  - 2016 - 2021 - Zero waste growth.
- ***Towards Zero Waste’ scenario. Represented by a compound growth over a 20 year period of –0.9% (i.e. an overall reduction).***

#### **Commercial Waste:**

- A ‘**High Growth**’ scenario, based on average MSW growth figures for the North Wales Region of 3.8%
- A ‘**Medium Growth**’ scenario. *Whilst this reflects compound growth over a 20 year period of nearly 2.2% per annum, the rate of waste growth varies and can be summarised as follows:*
  - *Until 2006 - Growth averaging 3.8% per annum*
  - *From 2007 to 2015 - A declining growth averaging 1.7% per annum*
  - *From 2016 to 2021 - Zero waste growth.*
- A ‘**Low Growth**’ scenario. Represented by 1% per annum growth to the year 2021.
- A ‘**Waste Strategy**’ scenario. This scenario has been developed to meet the 2020 household waste (secondary) target set within the National Waste Strategy for Wales, of achieving less than 300kg per person per year. This scenario is represented by a compound growth rate over 20 years of approximately –1.9%.

**Table 10: Actual & Average Annual Changes in I&C Waste Arisings in North Wales**

<b>INDUSTRIAL</b>		<b>COMMERCIAL</b>	
<b>Actual change in arisings 98/99 – 02/03</b>	<b>Average annual change in arisings 98/99 – 02/03</b>	<b>Actual change in arisings 98/99 – 02/03</b>	<b>Average annual change in arisings 98/99 – 02/03</b>
- 16.1%	- 4%	- 1.3%	- 0.3%

2.3.9 The information set out in Table 10 above challenges the forecast used for both industrial and commercial waste for the first RWP. For industrial, while the direction of change is as forecast, the current rate of reduction is greater than forecast. For commercial, the forecast was for growth until 2015 while the data shows a reduction in arisings.

2.3.10 The use of two years data is not a sound basis for analysing trends. Based upon likely future economic growth and the decline of industrial/manufacturing sectors, and growth in the service sector, the following forecasts will be used as the basis for the RWP review:

Industrial		Commercial	
2003/04 to 2009/10	2010/11 to 2013/14	2003/04 to 2009/10	2010/11 to 2013/14
- 3% per annum	Linear change towards - 1% per annum	+ 2% per annum	Linear change towards 0% per annum

### Current Management of I&C Waste

NWSW Target: Landfilling of I&C Waste
To divert waste from landfill:
<ul style="list-style-type: none"> <li>• By 2005, to reduce the amount of industrial and commercial waste sent to landfill to less than 85% of that landfilled in 1998;</li> <li>• By 2010, to reduce the amount of industrial and commercial waste going to landfill to less than 80% of that landfilled in 1998.</li> </ul>

**Table 11: Landfilled I&C Waste by Local Authority (tonnes)**

Area of Deposit	1998/99	2000/01 <sup>51</sup>	2002/03 <sup>52</sup>	2003/04	2004/05	2005 target	2010 target
Denbighshire	0	0	0	DNA	24,525	0	0
Wrexham	191,000	195,820	122,472	DNA	72,161	162,350	152,800
Flintshire	80,000	36,130	9,945	DNA	45,547 <sup>53</sup>	68,000	64,000
Conwy	18,000	37,960	51,799	DNA	121,783	15,300	14,400
Gwynedd	23,000	18,600	26,430	DNA	20,498	19,550	18,400
Anglesey	9,000	24,990	21,890	DNA	58,620	7,650	7,200
Powys (North)	5,000	6,750	9,163	DNA	102,026	4,250	4,000
<b>N WALES</b>	<b>326,000</b>	<b>320,250</b>	<b>241,699</b>	<b>DNA</b>	<b>354,066</b>	<b>277,100</b>	<b>260,800</b>

- 2.3.11 Table 11 shows that the Region is landfilling significantly more Industrial and Commercial than in 1998/99. The 2005 target has not been met by a considerable margin for each Local Authority and the region as a whole.
- 2.3.12 Individual LAs have greatly increased the amount of I&C waste being landfilled and this issue needs to be investigated and addressed.
- 2.3.13 The data included for 2004/05 has been calculated from site return data for sites with a waste management license or PPC permit. One issue is that the categorisation of the 2004/05 data differs from that of previous years. The 2004/05 category 'Household Industrial & Commercial' Waste now includes both municipal and non-municipal I&C waste and this was previously covered by separate categories of 'municipal' and 'I&C' waste.
- 2.3.14 On this basis, it is considered that the 2004/05 deposit data should only be included for information purposes.

<sup>51</sup> Data from Environment Agency's 'Local Waste Interrogator'.

<sup>52</sup> Data supplied by Environment Agency Wales.

<sup>53</sup> Issue of comparability regarding site return and arising data used to calculate this figure.

<b>NWSW Target: Landfilling of Biodegradable I&amp;C Waste</b>
To divert waste from landfill:
<ul style="list-style-type: none"> <li>• By 2005, to reduce the amount of industrial and commercial waste sent to landfill to less than 85% of that landfilled in 1998;</li> <li>• By 2010, to reduce the amount of industrial and commercial waste going to landfill to less than 80% of that landfilled in 1998.</li> </ul>

2.3.15 The EA (Wales) are currently investigating the biodegradable component of I&C waste. This data however, is not yet available.

## 2.4 Construction & Demolition Waste (C&D Waste)

### Current Arisings of C&D Waste

- 2.4.1 A study of C&D waste arisings has recently been completed, on behalf of WAG, for the year 2003. This study includes comparison with the figures produced for 2001 and does not provide data below a regional level. The study also includes arisings for excavation, quarry and dredging waste. Table 12 below shows a significant increase in arisings across the region.
- 2.4.2 No detailed data on the composition of C&D waste arisings is available.

**Table 12: C&D Waste Arisings (including Soil) by Local Authority**

<b>Authority</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Denbighshire	62,998	DNA	DNA	DNA	DNA
Wrexham	86,536	DNA	DNA	DNA	DNA
Flintshire	101,766	DNA	DNA	DNA	DNA
Conwy	77,536	DNA	DNA	DNA	DNA
Gwynedd	81,690	DNA	DNA	DNA	DNA
Anglesey	44,999	DNA	DNA	DNA	DNA
Powys (North)	40,845	DNA	DNA	DNA	DNA
<b>North Wales</b>	<b>496,370</b>	<b>DNA</b>	<b>1,560,000</b>	<b>DNA</b>	<b>1,460,000</b>

### Forecast Arisings of C&D Waste

- 2.4.3 The following forecasts were made in the Stage 1 Regional Waste Assessment 2003. The forecasts highlighted were used:
- A '**High Growth**' scenario of 1% per annum, assuming a significant and continuing upturn in construction activity
  - A '**No Growth**' scenario represented by zero growth, assuming that construction activity remains constant at current levels
  - A '**Towards Zero**' scenario of minus 2% per annum assuming that construction activity will continue to decline and that levels of waste are suppressed by changes in the nature of that activity.
- 2.4.4 Table 13 below shows that, based on the 2001 and 2003 survey results, C&D waste arisings have increased by 33% per annum. This is substantially at odds with the forecast of zero change used in the first RWP.

**Table 13: Average Annual Changes in C&D Waste Arisings in North Wales**

Average annual change in arisings 1999-2001	Average annual change in arisings 1999-2003
34.1%	33.6%

2.4.4 The WAG Waste Strategy Unit has expressed concerns regarding the accuracy of these surveys. In light of this it is suggested that the above data should not be used as the basis for producing forecasts for the next RWP.

2.4.5 In light of those concerns, and in the absence of any forecasts of change in the construction and demolition sector, the same forecast used as the basis for the first RWP will be used for the RWP review:

<b>2004 to 2025</b>
0% per annum

### Current Management of C&D Waste

<b>NWSW Target: Re-use &amp; Recycling of C&amp;D Waste</b>
To re-use and recycle construction and demolition waste: <ul style="list-style-type: none"> <li>• By 2005, to re-use or recycle at least 75% of C&amp;D waste produced;</li> <li>• By 2010, to re-use or recycle at least 85% of C&amp;D waste produced.</li> </ul>

**Table 14: Re-use & Recycling of C&D Waste**

<b>Authority</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Denbighshire	DNA	DNA	DNA	DNA	DNA
Wrexham	DNA	DNA	DNA	DNA	DNA
Flintshire	DNA	DNA	DNA	DNA	DNA
Conwy	DNA	DNA	DNA	DNA	DNA
Gwynedd	DNA	DNA	DNA	DNA	DNA
Anglesey	DNA	DNA	DNA	DNA	DNA
Powys (North)	DNA	DNA	DNA	DNA	DNA
<b>North Wales</b>	<b>372,768</b>	<b>DNA</b>	<b>1,447,000</b>	<b>DNA</b>	<b>1,210,000</b>

2.4.6 The data above shows that the region had met the 2005 target in 1999 (achieving 75% re-use and recycling) and continued to meet and exceed the target in the survey years (92.8% in 2001 and 82.9% in 2003).

2.4.7 A significant proportion of construction and demolition waste is classified as 'Used at Registered Exempt Sites'. The NWSW says of this: "the use of C&D waste at some exempt sites is arguably not re-use or recycling; the possible abuse of this exemption from licensing has been cause for considerable concern". Both the quantity and proportion of C&D waste used at registered exempt sites has decreased between 2001 and 2003 – by 80,000 tonnes and from 24% to 21%. If this category of waste is excluded from counting towards achieving the targets then in 2003 the region re-used or recycled only 62.3% of C&D waste arisings.

## 2.5 Agricultural Waste

### Current Arisings of Agricultural Waste

**Table 15: Agricultural Waste Arisings 1998/99 & 2003 by Local Authority**

<b>Authority</b>	<b>1998/99</b>	<b>2003</b>
Denbighshire	358,511	DNA
Wrexham	359,487	DNA
Flintshire	299,876	DNA
Conwy	360,287	DNA
Gwynedd	545,944	DNA
Anglesey	479,276	DNA
Powys (North)	798,109	DNA
<b>North Wales</b>	<b>3,201,490</b>	<b>9,929,292</b>

- 2.5.1 Wastes from agricultural premises are not currently controlled under waste management legislation. However, attention is being given to this waste stream for the following reasons:
- Future changes in policy may require treatment and/or disposal of at least some of the total waste arisings,
  - Many material streams within agricultural waste have the potential to cause environmental damage or harm human health,
  - The nature of many materials within agricultural waste may enable alternative management methods to be developed, whether as a single waste stream or combined with other waste types (eg MSW).
- 2.5.2 Table 15 above provides an estimate of agricultural waste arisings within North Wales for the years 1998/99 and 2003.
- 2.5.3 Of the respective regional totals, the vast majority of the arisings is unlikely to be defined as a controlled waste. Furthermore, the data supplied from the Agricultural Waste Survey 2003 does not enable comparison with the 1998/99 data, principally due to the fact that different categorisation and different units of measurement have been employed. As a result, a true analysis of the change in arisings of controlled agricultural waste is not possible.

### Forecast Arisings of Agricultural Waste

- 2.5.4 The following forecasts were considered in the Stage 1 Regional Waste Assessment 2003. The forecast highlighted was used:
- A **'High Growth' scenario**. Represented by 2.0% per annum growth to the year 2021.
  - A **'Declining Growth' scenario**. Average compound growth over a 20 year period is approximately -1.22% per annum, effectively replicating the MSW 'Medium Growth' scenario. The rate of waste growth varies over the 20 year period and can be summarised as follows:
    - To the year 2006 - Growth averaging 3.8% per annum;
    - 2007- 2015 - A reduced growth averaging 1.7% per annum;
    - 2016 - 2021 - Zero waste growth
  - A **'Towards Zero Waste' scenario**. Represented by a compound growth over a 20 year period of -0.9% (i.e. an overall reduction).
- 2.5.5 As stated in paragraph 2.5.3, the data supplied from the Agricultural Waste Survey 2003 does not enable comparison with the data published in the Stage 1 Regional Waste Assessment 2003. Therefore, neither analysis of change in arisings of controlled agricultural waste is possible nor review of the forecasts used as the basis for the first RWP.

- 2.5.6 In the absence of time-series data on past arisings and forecasts of future change in the agricultural sector, the same forecast used as the basis for the first RWP has been agreed as the basis for the RWP review:

<b>1998 to 2025</b>
- 1% per annum

### Current Management of Agricultural Waste

- 2.5.7 Information regarding the management of agricultural waste is not currently available.

## 2.6 Hazardous Wastes

### Current Arisings of Hazardous Wastes

NWSW Target: Hazardous Waste Arisings	
To reduce hazardous waste:	
<ul style="list-style-type: none"> <li>By 2010, to reduce the amount of hazardous waste generated by at least 20% compared with 2000.</li> </ul>	

**Table 16: Hazardous Waste Arisings (tonnes)<sup>54</sup>**

AUTHORITY	1999	2000	2001	2002	2003		2010 Target
Denbighshire	4,023	1,387	1,158	941	1,240		1,110
Wrexham	19,171	38,841	13,304	24,225	22,996		31,073
Flintshire	17,154	24,026	85,734	21,540	13,983		19,221
Conwy	1,757	1,893	2,781	3,831	22,597		1,514
Gwynedd	2,676	1,970	1,633	963	1,368		1,576
Anglesey	7,770	8,509	4,331	9,101	6,898		6,807
Powys (North)	1,167	1,154	1,042	3,188	1,720		923
<b>TOTAL</b>	<b>53,718</b>	<b>77,780</b>	<b>109,983</b>	<b>63,789</b>	<b>70,802</b>		<b>62,224</b>

- 2.6.1 Progress has been made in reducing hazardous waste arisings generally across the region based on progress in individual LA's -but more needs to be done. Wrexham's figures have gone up significantly from an already high figure. The dramatic increase in the 2003 figure for Conwy can be attributed to large amounts of contaminated soil, resulting from two large construction/demolition projects in this year<sup>55</sup>.
- 2.6.2 During July 2005, the definition of 'hazardous' waste was redefined through the introduction of the 'Hazardous Waste Regulations (Wales)'. The net effect of this is that an additional 180 waste are now classified as hazardous. The arisings data available does not allow analysis of any change occurring as a result in the change of definition, which is likely to have contributed to the increase in arisings in 2004/05.

<sup>54</sup> Data from Hazardous Waste Interrogator. Environment Agency (2003).

<sup>55</sup> Demolition of the old Hotpoint factory, Llandudno Junction and decontamination of the Ysgol John Bright site, Llandudno. Environment Agency & Conwy CBC.

### **Forecast Arisings of Hazardous Wastes**

- 2.6.3 The following forecasts were considered in the Stage 1 Regional Waste Assessment 2003. The forecast highlighted was used:
- A **'High Growth' scenario**. Represented by 2.0% per annum growth to the year 2021.
  - A **'Declining Growth' scenario**. Average compound growth over a 20 year period is approximately -1.22% per annum, effectively replicating the MSW 'Medium Growth' scenario. The rate of waste growth varies over the 20 year period and can be summarised as follows:
    - To the year 2006 - Growth averaging 3.8% per annum;
    - 2007- 2015 - A reduced growth averaging 1.7% per annum;
    - 2016 - 2021 - Zero waste growth.
  - **Towards Zero Waste' scenario**. Represented by a compound growth over a 20 year period of -0.9% (i.e. an overall reduction).
  - A **'Waste Strategy' scenario**. *This strategy has been developed to meet the 2010 hazardous waste target set within the National Waste Strategy for Wales, of reducing the amount of hazardous waste generated by at least 20% compared with 2000.*
- 2.6.4 Since the RWP was agreed there have been a number of significant regulatory changes. These changes have affected, and will continue to affect, the amount of hazardous waste, the nature of hazardous waste and the ways in which it must be managed.
- 2.6.5 However, future production levels of hazardous waste remain uncertain. Changing practices by a few large producing sectors could result in a significant reduction in some categories of hazardous waste. Conversely, this could simply be offset by the wider scope of the Regulations. In short, the uncertainty about the combined effects of all such regulatory changes has resulted in uncertainty about future arisings, required capacities and facility types for dealing with hazardous waste and the commercial viability of any new facilities.

**Table 17: Average Annual Changes in Hazardous Waste Arisings in North Wales**

<b>Change in arisings 99 - 00</b>	<b>Average annual change in arisings 99 - 01</b>	<b>Average annual change in arisings 99 - 02</b>	<b>Average annual change in arisings 99 - 03</b>
30.9%	30.1%	6.1%	7%

- 2.6.6 Table 17 shows the average annual changes calculated from the first year for which data was available to each subsequent year. The fluctuations in the rate of change make difficult the task of identifying any trends as a basis for forecasting. What is clear however is that this information challenges the forecast used for the first RWP.
- 2.6.7 While the forecast was for a low rate of reduction to 2010, the actual annual tonnages show an initial significant increase in arisings and since 2001 show a reduction in arisings. Furthermore, the current and future situation is complicated by the factors mentioned above.
- 2.6.8 It is therefore likely that arisings of hazardous waste will show an increase in the short term from 2003 to 2007 and will then return to a reduction trend as hazardous products are phased out and cost pressures reduce arisings. In light of these factors, the following forecast will be used in the RWP review:

<b>2005 to 2015</b>
Linear change from + 5% towards - 5% per annum

## Current Management of Hazardous Wastes

NWSW Target: Facilities for Hazardous Household Waste	
Improved segregation of hazardous household waste:	
<ul style="list-style-type: none"> <li>By 2003/04 all civic amenity sites should have facilities to receive and store, prior to proper disposal, bonded asbestos sheets. All sites should also have facilities for receiving and storing, prior to recycling, oils, paints, solvents and fluorescent light bulbs.</li> </ul>	

**Table 18: Civic Amenity Sites Taking Hazardous Household Wastes<sup>56</sup>**

	Asbestos	Oils	Paints	Solvents	Fluro bulbs
No. of CA sites	15	21	0	0	12
% of CA sites	60	84	0	0	48

2.6.9 Appendix 1 lists the 25 Civic Amenity sites/Household Recycling Centres within the region and details the hazardous household wastes which they are licensed or registered exempt to receive. The region is failing to meet the NWSW target for facilities for the improved segregation of household waste.

**Table 19: Hazardous Waste Arisings by Management Method, 2003 ('000 tonnes)**

Authority	Incineration with Energy Recovery	Incineration without Energy Recovery	Landfill	Recycling / Reuse	Waste Transfer	Treatment	Other Fate	Total
Denbighshire	0.55		259.01	33.92	342.25	603.88		1,239.61
Wrexham	0.03	9.68	6,465.75	11,618.94	2,870.95	2,030.95		22,996.30
Flintshire	252.67	542	1,615	2,269.09	3,151.68	6,150.58	1.84	13,982.86
Conwy		0.18	21,513.52	338.66	151.75	593.12		22,597.23
Gwynedd	1.12	5.19	177.05	10.17	755.25	419.20		1,367.98
Anglesey		547.32	4,489.94	1,024.65	453.47	382.33		6,897.71
Powys (North)		22.19	329.12	183.35	244.47	941.18		1,720.31
<b>North Wales</b>	<b>254.37</b>	<b>1,126.56</b>	<b>34,849.39</b>	<b>15,478.78</b>	<b>7,969.82</b>	<b>11,121.24</b>	<b>1.84</b>	<b>70,802</b>

2.6.10 Table 19 details the 2003 hazardous waste arisings by Local Authority and management method. The information can be summarised as follows:

- 49% of the arisings in 2003 were landfilled
- 22% of the region's total was recycled/reused
- 16% of arisings were treated.

2.6.11 The new legislative regime will mean that it is probable that more hazardous waste recycling and treatment facilities will need to be developed. However, uncertainty about the combined effects of all such regulatory changes has resulted in uncertainty about future arisings, required capacities and facility types for dealing with hazardous waste and the commercial viability of any new facilities. This is particularly relevant in North Wales given the available capacity for hazardous waste treatment in North West England.

2.6.12 Ideally a broad assessment should be made of current capacity against future capacity needs as a way of identifying the capacity shortfall that needs land use provision and ultimately determine the region's ability to be self-sufficient. However, at present there is very little information available to enable such an analysis.

<sup>56</sup> Data supplied by Environment Agency Wales.

## 2.7 Waste Electrical & Electronic Equipment (WEEE)

### Current Arisings of WEEE

- 2.7.1 The Industry Council for Electronic Equipment Recycling (ICER) is carrying out research into arisings of WEEE in the UK and amounts of equipment that will need to be recycled to comply with the WEEE Directive. An Interim Report, published January 2005, covers waste domestic equipment, what is currently happening to it, the amounts likely to be separately collected for recycling and what this could cost.
- 2.7.2 The study estimates that 939,000 tonnes of domestic equipment was discarded in the UK in 2003.

**Table 20: Arisings of Domestic WEEE in the UK in 2003**

Categories of Domestic WEEE	Tonnage Discarded
Large household appliances	644,000
Small household appliances	80,000
IT/telecoms equipment	68,000
Consumer equipment	120,000
Tools	23,000
Toys, leisure & sports equipment	2,000
Lighting	2,000
Monitoring & control equipment	<1,000
<b>Total UK Domestic WEEE</b>	<b>939,000</b>
<b>Total Wales Domestic WEEE</b>	<b>47,889</b>
<b>Total North Wales Domestic WEEE</b>	<b>13,040</b>

- 2.7.3 An estimate for WEEE arisings in 1998 for Wales was given 51,200 tonnes. Based on population, this figure equated to 12,698 tonnes of WEEE for the North region. Using a similar method of apportionment, Table 20 provides an estimated arisings total in 2003 for the region of 13,040 tonnes.
- 2.7.4 It is acknowledged that this is a crude method of establishing arisings of domestic WEEE. However, until specific data is available for Wales, it remains the only method of achieving some indication of arisings.

### Forecast Arisings of WEEE

**Table 21: Average Annual Changes in Domestic WEEE Arisings in North Wales**

Total estimated arisings 1998	Total estimated arisings 2003	Actual change in arisings 98 – 03	Average annual change in arisings 98 - 03
12,698	13,040	2.6%	0.5%

- 2.7.5 There are currently no existing forecasts for estimating future arisings of WEEE. Table 21 however, shows that between the two specified years there has been an estimated increase of 2.6% (342 tonnes). This equates to an average annual increase of 0.5%.
- 2.7.6 Forecast decision to be made at a later date.

### Current Management of WEEE

- 2.7.7 The only types of domestic WEEE currently being recycled in the UK on a large scale are in the large household appliance category, namely refrigeration equipment, large white goods and microwave ovens.

- 2.7.8 Large white goods and microwave ovens make up over 50% by weight of domestic WEEE arisings and refrigeration equipment a further 16%.
- 2.7.9 The treatment, recycling and recovery requirements of the WEEE Directive apply only to WEEE that has been separately collected. However, until it is clear how many separate collection facilities there will be in the UK, it is difficult to estimate how much equipment is likely to be separately collected.
- 2.7.10 As there is no current requirement for Civic Amenity sites to offer separate collection of WEEE, many Local Authorities are waiting to know the criteria for becoming a designated collection facility for WEEE before committing themselves. It is also not yet known whether there will be a network of collection facilities provided by a retailer compliance scheme to complement the Civic Amenity site network.

## **2.8 End of Life Vehicles (ELVs)**

- 2.8.1 The ELV Regulations 2005 require that sites that receive undepolluted ELVs reach appropriate treatment standards and recycling/recovery targets are reached. The EA licenses ELV sites and all sites that receive and process undepolluted vehicles must now operate with a Waste Management License.
- 2.8.2 The following assesses the current position for Wales in terms of the number and distribution of licensed sites, the number of those sites who have reached the appropriate treatment standards to satisfy Schedule 5 of the ELV Regulations and the licensed capacity of each of these sites.
- 2.8.3 Licensed capacity does suggest that there is sufficient capacity in Wales to deal with forecasted ELV arisings. Of the 106 sites in Wales, 74 are currently compliant with Schedule 5 of the ELV Regulations.

### **Current/Forecast Arisings of ELVs**

- 2.8.4 Examination of site returns made by these facilities suggests that currently only a third of predicted ELV waste arisings have been captured. Returns were not available for a significant number of ELV sites as many licenses were issued during 2005 and the sites have not yet been required to submit a return to the EA. This position will improve over time, but at present the incomplete data provides little direction in accurately measuring either throughput at licensed sites or indeed future arisings.
- 2.8.5 The sites licensed for ELVs fall primarily within three categories:
- A19 – Metal Recycling Site (Vehicle Dismantler)
  - A19a – ELV Facility
  - A20 – Metal Recycling Site.
- 2.8.6 Tables 22, 23 and 24 show the sites licensed in the region who made site returns under each of the categories above, the tonnage of recorded waste and a forecast of how much would be treated per annum. The tonnage each site is licensed for is also indicated as well as what proportion of this licensed capacity has been taken up through returns for underpolluted ELVs.

**Table 22: Metal Recycling Sites in North Wales who had made returns for waste received under EWC code 160104**

WML Number	Site Name	Sch5 Compliant	Returns for 160104 (t)	Number of quarters covered	Predicted annual tonnage	Max licensed annual capacity (t)	Proportion of capacity used against 160104 waste
37037	Jacques Garage, Wrexham	Yes	1900	12	633	4999	12.67%
37067	MR Jackson & Sons, Old Aston Hill, Ewloe	Yes	594	4	594	676	87.87%
37139	Flintspeed Car & Commercial Dismantlers, Holywell	Yes	181	4	181	4999	3.62%
37141	K G Matthews Auto Salvage	Yes	770	8	385	4999	7.70%
37220	Mr D Lockett., Queensferry Car Breakers	Yes	469.34	1	1877	4999	37.55%
37231	H K Motors,	Yes	1020	4	1020	4999	20.40%
37261	Cambrian Autoparts Northwest Ltd	Yes	2000	4	2000	4999	40.01%
<b>Total</b>					<b>6691</b>	<b>30670</b>	<b>21.82%</b>

**Table 23: Metal Recycling Sites in North Wales who had made returns for waste received under EWC code 160104**

WML Number	Site Name	Sch5 Compliant	Returns for 160104 (t)	Number of quarters covered	Predicted annual tonnage	Max licensed annual capacity (t)	Proportion of capacity used against 160104 waste
37085	P Lock, Pont Penrhyn Scrapyard, Bangor	Yes	1232	4	1232	5200	23.69%
37131	Bagillt Car Spares, Bettisfield Colliery, Bagillt,	Yes	1220	5	976	4999	19.52%
<b>Total</b>					<b>2208</b>	<b>10199</b>	<b>21.65%</b>

**Table 24: ELV Facilities in North Wales who had made waste returns for waste received under EWC code 16014**

WML Number	Site Name	Sch5 Compliant	Returns for 160104 (t)	Number of quarters covered	Predicted annual tonnage	Max licensed annual capacity (t)	Proportion of capacity used against 160104 waste
37262	HL Motors, Llandudno Junction	Yes	2257	4	2257	2499	90.32%
<b>Total</b>					<b>2257</b>	<b>2499</b>	<b>90.32%</b>

### Current Management of ELVs

NWSW Target: Re-use & Recovery of End of Life Vehicles
<p>The End of Life Vehicles (ELV) Directive targets [set for economic operators]:</p> <ul style="list-style-type: none"> <li>• No later than 1st January 2006, for all ELV, re-use and recovery shall be increased to a minimum of 85% by an average weight per vehicle and year. Within the same time limit the re-use and recycling shall be increased to a minimum of 80% by an average weight per vehicle and year;</li> <li>• No later than 1st January 2015, for all ELV, the re-use and recovery shall be increased to a minimum of 95% by an average weight per vehicle and year. Within the same time limit, the re-use and recycling shall be increased to a minimum of 85% by an average weight per vehicle and year.</li> </ul>

- 2.8.7 The overall licensed annual capacity for the region is 177,364 tonnes. However, this maximum figure is based either on the upper limit allowed by the subsistence charge paid or more specifically detailed figures from the license where those exist.
- 2.8.8 Those sites licensed as A19a deal solely with ELV waste, whereas larger mixed sites deal with a range of waste types. In these cases, the overall maximum capacity would include these additional wastes.
- 2.8.9 In a 2003 report for DEFRA, it is estimated that 81,246 tonnes of ELV waste arose in Wales. Based on the tonnage forecast of ELV waste, the licensed capacity of the A19 and A19a ELV facilities is 74,312 tonnes in North Wales. This would suggest that there is sufficient licensed capacity to deal with potential ELV arisings in the region.

## **2.9 Waste Tyres**

### Current Arisings of Waste Tyres

- 2.9.1 No data is currently available.

### **Forecast Arisings of Waste Tyres**

- 2.9.2 As no baseline data is currently available, forecasting of waste tyre arisings cannot be undertaken.

### **Current Management of Waste Tyres**

- 2.9.3 No data is currently available.

## **2.10 Packaging Waste**

- 2.10.1 The Producer Responsibility Obligations (Packaging Waste) Regulations 1997 require that business handling over and above 50 tonnes of packaging per annum be responsible for recovering/recycling a certain percentage of packaging waste.
- 2.10.2 Evidence of recovery is supplied to the Environment Agency in the form of Packaging Recovery Notes (PRNs) or Packaging Recovery Export Notes (PERNs).

### **Current Arisings of Packaging Waste**

- 2.10.3 In order to understand current packaging waste arisings, it would be useful to analyse recovery with regard to waste generated by individual obligated producers in Wales. However, this is not possible as each business registers once from a head office location, taking into account total packaging handled across the organisation. For larger organisations which operate across several sites in England and Wales, a figure cannot be attributed to a specific site and thus attributing a specific proportion to sites in Wales is not possible.
- 2.10.4 Figures provided by each of the materials organisations produce an estimate of total packaging waste, these figures are published by DEFRA. The UK has increased annually the proportion of this figure recovered from 32% in 1998 to 56% in 2004. To assess the proportion of this packaging waste attributable to Wales, a population based pro-rata reduction has been applied to the UK figures. For the years 2002, 2003 and 2004, based on this assumption, Welsh re-processors have recovered 76%, 81% and 67% of the equivalent total packaging produced in Wales.

### **Forecast Arisings of Packaging Waste**

- 2.10.5 Forecasts would provide estimates of capacity needed to meet future targets. However, as the baseline data is not currently available, forecasting cannot be undertaken.

### **Current Management of Packaging Waste**

<b>NWSW Target: Recovery &amp; Recycling of Packing Waste</b>
The 2002 targets for companies obligated under the Packaging Regulations: <ul style="list-style-type: none"><li>• Recover 59% of packaging waste;</li><li>• Recycle at least 19% of each material.</li></ul>

<b>NWSW Target: Recovery &amp; Recycling of Packing Waste</b>	
New EC Directive (2004/12/EC):	
<ul style="list-style-type: none"> <li>• No later than 31<sup>st</sup> December 2008, 60% as a minimum by weight of packaging waste will be recovered or incinerated at waste incineration plants with energy recovery;</li> <li>• No later than 31<sup>st</sup> December 2008 the following recycling targets for materials contained in packaging waste must be attained: 60% byweight for glass, 60% by weight for paper and board, 50% by weight for metals, 22.5% by weight for plastics and 15% by weight for wood.</li> </ul>	

- 2.10.6 The number of accredited re-processors regulated by EA Wales has risen by 65% between 2000 and 2003. These are predominantly based in South East Wales (23), with 8 sites in the North and 4 in South West Wales.
- 2.10.7 The data presented in the tables below has been apportioned according to the population of Wales relative to the UK as a whole.
- 2.10.8 Table 25 below shows the breakdown by material for packaging re-processed in Wales compared with the UK for 2002-2004, and Table 26 shows the packaging tonnage, by material, recovered in North Wales 2002-2004 compared with that of Wales.

**Table 25: Relative Contribution of each Material to Packaging Recovery in Wales and the UK 2002-2004 (tonnes)**

	2002		2003		2004	
	Wales	UK	Wales	UK	Wales	UK
<b>Paper</b>	58,520	1,853,211	64,470	1,916,781	62,522	2,144,669
<b>Glass</b>	11,412	1,041,048	2,938	1,103,818	3,786	1,221,374
<b>Aluminium</b>	2,068	72,793	1,507	74,643	2,594	83,283
<b>Steel</b>	41,088	352,539	38,464	357,915	58,141	395,437
<b>Plastic</b>	50,199	895,358	107,690	951,613	23,170	1,095,896
<b>Wood</b>	209,489	471,784	191,540	472,055	190,124	527,357
<b>Other</b>	0	11,047	18	12,373	86	13,384
<b>Total</b>	<b>372,776</b>	<b>4,697,780</b>	<b>406,627</b>	<b>4,889,198</b>	<b>340,423</b>	<b>5,481,400</b>

**Table 26: Packaging Tonnage Recovered in North Wales 2002-2004, by Material**

	2002		2003		2004	
	N Wales	Wales	N Wales	Wales	N Wales	Wales
<b>Paper</b>	1,064	58,520	1,032	64,470	2,000	62,522
<b>Glass</b>	0	11,412	14	2,938	306	3,786
<b>Aluminium</b>	0	2,068	213	1,507	219	2,594
<b>Steel</b>	0	41,088	0	38,464	0	58,141
<b>Plastic</b>	3,075	50,199	6,701	107,690	14,827	23,170
<b>Wood</b>	129,371	209,489	177,137	191,540	174,408	190,124
<b>Total</b>	<b>133,510</b>	<b>372,776</b>	<b>185,097</b>	<b>406,609</b>	<b>191,760</b>	<b>340,337</b>

- 2.10.9 In summary, of the six material streams analysed, Wales had recovered above the UK average for steel and wood packaging, recovery of plastic and aluminium packaging approximately reflected the UK position but contributions to the glass and paper streams were considerably behind overall UK rates. Welsh re-processors have also recovered more packaging than their population based pro-rata targets.



### 3. Monitoring the Region's Facilities

#### 3.1 Implementing the RWP – Policies in Development Plans

3.1.1 TAN 21, published in 2001, requires Local Planning Authorities to adopt waste policies in development plans or Supplementary Planning Guidance that take account of the RWP:

- Development plans “*will be required to ensure there is adequate provision for the facilities in accordance with the RWP*”<sup>57</sup>.
- Each local authority should include in its development plan “*elements of the agreed regional plan that are germane to its area...If UDPs are at an advanced stage supplementary planning guidance can be issued or an early review of the UDP be undertaken to ensure that the requirements of Article 7 of the Waste Framework Directive are complied with. In some cases, it may be necessary to amend a UDP at a fairly late stage in the adoption process*”<sup>58</sup>.
- Development plans “*should include a statement to explain how the Regional Waste Plan impacts upon the UDP policies and proposals and how the proposals and policies in the UDP help to facilitate the implementation of the RWP*”<sup>59</sup>.

3.1.2 In accordance with TAN 21, the RWP<sup>60</sup> set out for each unitary authority area the 2013 capacity requirement for each type of facility and stated that provision must be made in development plans for meeting those capacity requirements. Making such provision would fulfil the above requirements of the TAN and therefore gives rise to the **first indicator for monitoring implementation of the RWP**:

##### INDICATOR 1

- Clear and positive provision for RWP capacity requirements germane to a local planning authority's area in that authority's adopted planning policy documents.

3.1.3 The TAN places particular emphasis on the requirement for development plans to contain policies regarding suitable locations:

- Following the apportionment in the RWP of type and capacity of facilities to local authorities “*it would be for the individual local authorities to determine actual locations of facilities and make provisions in their UDP*”<sup>61</sup>.
- Development plans “*will need to indicate suitable locations for establishing the various element of the future waste management networks*”<sup>62</sup>.
- “*There should be a balance of site specific and criteria based policies to provide as much information as possible on the locations likely to be acceptable for such development*”<sup>63</sup>.
- The WAG expects Local Planning Authorities to ensure that development plans “*provide clear proposals, policies and guidance for new waste infrastructure by indicating suitable locations or types of location that may be acceptable for waste facilities to ensure that the right facilities are in the right place at the right time within the context of the Regional Waste Plan*”<sup>64</sup>.

3.1.4 These requirements give rise to the **second indicator for monitoring the implementation of the RWP**:

##### INDICATOR 2

- Adoption by local planning authorities of policies regarding feasible and suitable locations or types of location for new waste management / resource recovery facilities.

3.1.5 All of the above TAN requirements were underlined, and suggested minimum policy set out, in a Policy Clarification Note issued by the WAG on 28 May 2004.

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<sup>57</sup> Para 2.6. *Planning Policy Wales Technical Advice Note (Wales) 21: Waste*. WAG (2001).

<sup>58</sup> Para 2.12. *Planning Policy Wales Technical Advice Note (Wales) 21: Waste*. WAG (2001).

<sup>59</sup> Para 5.4. *Planning Policy Wales Technical Advice Note (Wales) 21: Waste*. WAG (2001).

<sup>60</sup> Appendix II. *North Wales Regional Waste Plan*. WAG (2004).

<sup>61</sup> Para 2.15. *Planning Policy Wales Technical Advice Note (Wales) 21: Waste*. WAG (2001).

<sup>62</sup> Para 4.1. *Planning Policy Wales Technical Advice Note (Wales) 21: Waste*. WAG (2001).

<sup>63</sup> Para 5.1. *Planning Policy Wales Technical Advice Note (Wales) 21: Waste*. WAG (2001).

<sup>64</sup> Para 5.11. *Planning Policy Wales Technical Advice Note (Wales) 21: Waste*. WAG (2001).

- 3.1.6 Appendix 2 sets out each local planning authority's policies on waste in their current UDPs which can be used to measure progress against these indicators.
- 3.1.7 The RWP was not approved by the LPAs and WAG until March 2004 and the document not published until August 2004. The LPAs in North Wales were at various stages in UDP preparation – some had been past Deposit and approaching or past Public Inquiry. These were less able to make further changes to UDP policies and proposals without the need for a further round of changes, statutory consultation and possible 2<sup>nd</sup> Inquiry. Others were less well advanced and should be able to include appropriate policies and proposals with less impact in terms of delay or costs.
- 3.1.8 **Wrexham UDP** which was adopted in March 2005 contains an appropriately worded policy **MW 12: Waste Facilities** (see Appendix 2f) which meets the above requirements in 2 respects-
- adequate feasible, suitable and available land is available on general industrial estates to meet the required capacity for waste facilities for Wrexham in the RWP
  - the policy makes positive provision by identifying land on general industrial estates as the appropriate location for waste facilities.

However, it appears that the other UDP's, whilst setting out criteria based policies, do not appear to make such positive provision. It is a matter for each LPA to address this situation.

## 3.2 Facilities – Operational, In Development & Proposed

- 3.2.1 Each authority has provided an update on the known operational, in-development and proposed facilities across the region. For the purposes of this report, 'in-development' is to mean those facilities either under construction or at the commissioning phase and 'proposed' is to mean those facilities at the planning application stage.
- 3.2.2 Table 27 below provides details for in-development and proposed facilities in the region in addition to facilities which have become operational since the production of the last AMR.

**Table 27: In-development & Proposed Waste Management Facilities**

Authority	Location	Details
Denbighshire	Bodelwyddan	Bulking Facility for recyclable materials, runs at 1,000 tpa paper, 500 tpa glass & 150 tpa mixed cans.
Wrexahm	Bangor is y Coed	In-development minor landfill scheme (agricultural improvement).
Flintshire	Greenfield	Civic Amenity site for timber, green waste, cardboard, general waste, soils, rubble, scrap metal, WEEE, paint & other recyclables. Ten bays with 40 cubic metre skips.
	Buckley	Materials Sorting Facility. Receives skips from recycling parks. 5,000 sq ft with tyre derimming operation and gas bottle compound.
Conwy	Gofer	Bulking Station for recyclates. Accepts glass, paper, metal, card & plastics. 25,000 tpa capacity, currently under construction.
Gwynedd	Caernarfon	'Recycling Park' – Civic Amenity/Household Waste Recycling Site and MRF/Transfer Station. CA site has capacity of 3,250 tpa and the MRF/TS has 4,000 tpa capacity. Expected to be operational in June 2006.
	Bangor/Harlech/Bala	Household Waste Recycling sites x 3. Capacities: Bangor – 1,750 tpa, Harlech – 900 tpa, Bala – 1,750 tpa. Expected to be operational between April and June 2006.
Anglesey	Penhesgyn	Transfer Station to receive municipal waste. Currently under construction.
Powys		No new facilities.

### 3.3 Local Authority Progress in Infrastructure Procurement

- 3.3.1 The planning of an integrated regional waste network from the increased recovery of resources from municipal waste would be helped by a clear picture of where each LA is regarding procurement of waste management /resource recovery services for their area.
- 3.3.2 Local Authorities were requested to provide details of their progress in infrastructure procurement and detail any future contract plans. Table 28 summarises the responses received.

**Table 28: LA Progress in the Procurement of Waste Management Facilities.**

Authority	Progress in Procurement Process
Anglesey	Main contracts out to tender. In-vessel composting plant approved. Transfer station under construction at Penhesgyn landfill – due to complete this year.
Gwynedd	Proposals for 4 CA sites and an in-vessel composting plant at Ffridd Rhasus landfill. Application due for in-vessel composting facility at Llwyn Isa. Negotiating with Anglesey on regional composting facility.
Conwy	Contract signed for waste disposal until 2010. Bulking station to be handed over in April. Considering locations for 2 CA sites.
Denbighshire	Joint 4-year landfill disposal contract with Conwy begins April. Considering contracts with Conwy after this period.
Wrexham	Planning application for MRF/pyrolysis facility in abeyance, due to be decided in April.
Flintshire	No procurement progress to report.
Powys	Awaiting EC bid approval for an AD plant at Bryn Posteg landfill.

- 3.3.3 All the Local Authorities recognise the need to plan for the future, and procure the services and infrastructure required to meet the requirements of the WAG targets. Although there has been some progress in this area, particularly in the increased provision of CA sites, there are a number of potential barriers. These should be monitored and include:
- a likely shortfall in landfill capacity across the Region
  - a lack of secure ongoing funding
  - difficulties in engaging the public in recycling
  - a failure to identify and allocate suitable sites in UDP's
  - questions regarding long term commercial viability of facilities
  - issues regarding genuine availability of industrial sites (eg infrastructure, marketing constraints).
- 3.3.4 Table A2 (Appendix 3) sets out the required capacity requirements of each Local Authority to implement the RWP.

### 3.4 PPC Permitting and Landfill Capacity

- 3.4.1 The AMR 2005 set out and explained the recent change in regime concerning the regulation of landfill sites. Previously, all landfill sites had been regulated by the EA through Waste Management Licenses (WMLs) under Part II of the Environmental Protection Act 1990, now all landfill sites are regulated through the PPC regime under the Pollution Prevention and Control Act 1999.
- 3.4.2 It has been suggested that the change to this stricter and tighter regime may have the consequence of causing a significant reduction in landfill void space within the region for the following reasons:
- Some landfills may fail the re-permitting process on environmental grounds,
  - Some landfills may fail the re-permitting process because of the way they are engineered and/or operated and therefore would require extensive engineering works to meet the technical standards of the Landfill Directive
  - Some landfill operators may choose not to make a re-permitting application and, instead, close their operation.
- 3.4.3 Table 29 below gives updated information on the PPC status, as of the beginning of February 2006, of the landfills in the region. It should be noted that the situation is highly fluid and that information relating to these particular landfills can be subject to rapid change.

**Table 29: PPC Application Status of Landfill Sites in North Wales**

Authority	Site Name	PPC Status
Denbighshire	Moel y Faen Quarry	No application received
Wrexham	Hafod Quarry	Permit issued
	Pen y Bont	Permit issued
	Astbury Quarry	Application withdrawn
Flintshire	Brookhill	Permit issued
	British Steel No. 1	Permit in determination
	Cefn Mawr	Permit withdrawn
Conwy	Llanddulas	Permit issued
Gwynedd	Ffridd Rhasus (Areas 1 & 3)	Permit issued
	Vaynol woodlands	Permit in determination
	Cilgwyn (Faengoch)	Permit refused
	Cilgwyn (Gloddfa)	Permit refused
	Ffridd Rhasus (Area 2)	Permit refused
Anglesey	Rhuddlan Bach Quarry	Permit in determination
	Penhesgyn	Permit refused
	Nant Newydd Quarry	Application withdrawn
	Tywyn Trewan	No application received
Powys (North)	Bryn Posteg	Permit issued

3.4.4 Outstanding landfills due to make applications are listed in Table 30. However, although sites have been notified of their tranche dates, they do not need to inform the EA whether they intend to apply or close before this date. For example, small inert landfills may decide to close rather than make a PPC application for economic or other reasons.

**Table 30: Outstanding Landfills due to make PPC Permit Applications**

Authority	Site Name	Tranche Date
Flintshire	The Pet Cemetery	09/05/2006
Conwy	Ty Mawr Farm	09/05/2006
Gwynedd	Ty Mawr East Quarry	09/05/2006
Anglesey	Bryn Maethu Landfill	09/05/2006

3.4.5 A voidspace survey recently carried out by the EA provides an indication of the capacity situation as at 31<sup>st</sup> March 2005. The outputs of the work are based on the following three scenarios:

- Scenario 1: best case totals presume all landfills refused but still active use all remaining void, and all sites in determination for PPC applications and in future tranches will receive permits,
- Scenario 2: intermediate totals presume that all landfills under appeal are refused but landfills in current and future determination tranches are permitted,
- Scenario 3: worst case totals presume all current and future permit determinations will be refused and none of the void for refused permits is available.

3.4.6 Table 31 below provides the information relating to PPC re-permitting as at 30<sup>th</sup> December 2005 and provides data on the split of non-hazardous/inert and factory cartilage landfill void space.

**Table 31: Prediction of Landfill Void Space Remaining in North Wales**

Landfill type	Void for PPC permits issued (m <sup>3</sup> )	Void for PPC permits being determined (m <sup>3</sup> )	Void for future PPC application tranches (m <sup>3</sup> )	Void at sites without a PPC permit not active (m <sup>3</sup> )	Void at sites without a PPC permit still active (m <sup>3</sup> )	Best case total (m <sup>3</sup> )	Worst case total (m <sup>3</sup> )
Non-hazardous	7,165,088	1,385,710	0	1,150,000	926,899	9,477,697	7,165,088
Inert	0	5,000	1,700,787	0	0	1,705,787	0
Factory cartilage	0	123,611	0	0	0	123,611	0
<b>N Wales</b>	<b>7,165,088</b>	<b>1,514,321</b>	<b>1,700,787</b>	<b>1,150,000</b>	<b>926,899</b>	<b>11,307,095</b>	<b>7,165,088</b>

- 3.4.7 The data predicts a best case remaining capacity for the region of 11,307,095m<sup>3</sup> and a worst case capacity of 7,165,088m<sup>3</sup>. Given the nature of the data above and the fact that no allowances have been made for void used since March 2005 for most sites, it is not meaningful to carry out lifespan estimates on this data at this time. It is an obvious fact however, that landfill capacity is decreasing.
- 3.4.8 The figures set out above will be reviewed again in May 2006 to take account of agreements of closure plans (with subsequent reductions in void), applications for Tranche 7 and the completion of the next voidspace survey.

## **4. Information for the next AMR**

4.1 The third Annual Monitoring Report will be published in March 2007.

4.2 The following information was not available for use in this AMR to enable monitoring of progress against targets in the NSW and to fulfill contract requirements but ideally should be collected/collated/published in time for inclusion in the March 2007 AMR:

- Public Body waste arisings
- Business Waste arisings
- Composition Analysis of I&C waste for estimation of biodegradable fraction to landfill
- C&D waste arisings data
- C&D re-use and recycling data
- ELV re-use, recovery and recycling data
- Facility capacity information
- Import & Export data for all waste types
- Composition of all waste types
- Waste tyres data
- More detailed data on arisings/recycling of WEEE.

## 5. Conclusions

- 5.1 The North Waste Group will be publishing a revised RWP in March 2007. Central to the process of preparing the revised RWP will be the collection and analysis of information regarding the waste situation within the region and the implementation of the RWP. This information has been, and will be, published in AMRs in March 2005, 2006 and 2007.
- 5.2 Information on the waste situation within the region collected in order to monitor the region's progress in meeting the 12 targets contained within the NWSW, and also in monitoring arisings and management of controlled waste. It was not possible to monitor all of the NWSW targets or to provide information on particular types of wastes due to restrictions on data availability/existence.
- 5.3 The data collected for the Municipal Waste stream revealed mixed results:
- There is overall upward trend in the region's Household Waste arisings per household and per person between 1998/99 and 2004/05. **The current trends are in the wrong direction;** growth away from the target figures rather than reduction towards meeting them. This issue needs to be addressed quickly.
  - The region has met and exceeded the 2003/04 targets for the recycling and composting of Municipal Waste. **The 2006/07 targets still present a significant challenge;** a considerable increase in composting levels and facilities will be required by a number of local authorities.
  - The region is currently landfilling less BMW than the 2004/05 allowance. The region is currently half way in time from the base line year to the target year. **Considerable progress has been achieved in the time remaining till the target year and the region is on target.**
  - The region has **failed to meet the target for the improved segregation of hazardous household waste** through the provision of reception and storage facilities for five specified wastes at CA sites. **None of the 22 sites have facilities to receive and store all of the hazardous household wastes specified in the target.**
- 5.4 I&C waste **arisings have decreased across the region** between 98/99 and 02/03. During 02/03 the region was on target to meet the 2005 target for landfilling I&C waste. However, this figure significantly increased in 04/05, suggesting that **the region did not meet the 2005 target.** Given that the data for that year has been categorised differently from previous years, this cannot be treated with any certainty.
- 5.5 C&D waste arisings data shows that this figure has **risen dramatically in the region,** significantly beyond that which was expected. In line with this increase, re-use and recycling has also increased significantly. **In 2003 the region was on course to achieve the 2005 target.** However, there are concerns regarding the accuracy of this data and so this provides limited usefulness in assessing the current situation or forecasting for the future.
- 5.6 Agricultural waste arisings **appear to have increased significantly** in the region between 98/99 and 2003. However, the two survey years cannot be compared due to different categorization and units of measurement being used.
- 5.7 The data collected for Hazardous Waste arisings shows **no obvious trend over time, although arisings in 2003 were lower than those in 1999.** As a result of this reduction **the region as a whole is close to meeting the 2010 target for reducing the production of Hazardous Waste.**
- 5.8 There is currently **insufficient accurate data to monitor any changes in WEEE arisings and management.**
- 5.9 There is currently insufficient accurate data to monitor any changes in ELV arisings and management. However, the data available suggests that **there is sufficient licensed capacity in the region to deal with potential arisings.**
- 5.10 There is currently **no data available to monitor waste tyre arisings and management.**
- 5.11 It is currently **not possible to attribute packaging waste arisings** to Wales. Based on population pro-rata targets, **Wales is currently recovering more than it's target.**
- 5.6 There is **incomplete coverage of adopted UDPs** in North Wales. Only the recently adopted Wrexham UDP contains an appropriate policy regime to comply with the TAN and RWP by making positive position on feasible suitable and available land. This is a matter for each LPA to address.

- 5.7 Until recently all landfill sites have been regulated by the EA through the WML regime under the Environmental Protection Act 1990. Landfills are now being re-permitted through the PPC regime under the Pollution Prevention and Control Act 1999. Currently 6 landfills in the region have been issued with PPC permits, 3 are currently in determination and another 4 are due to make applications in the future. **The change in regime may have the consequence of causing a significant reduction in landfill void space** within the region. This is **an emerging situation with potentially considerable consequences** and will have to be monitored closely by the North Wales Waste Group.

## **APPENDICES**

## Appendix 1

List of Civic Amenity Sites Licensed or Registered Exempt to Receive and Store certain Hazardous Household Wastes (February 2005)<sup>65</sup>.

**Table A1**

Site Name	Licensed/Registered Exempt to Receive & Store:					
	Asbestos Sheets	Oil	Paint	Solvents	Fluorescent Light Bulbs	Other
Mochdre CA Site	No	Yes	No	No	Yes	Batteries, fridges, WEEE
Penhesgyn Gors CA Site	Yes	Yes	No	No	No	Batteries, fridges, WEEE
Rhwngyddwryd CA Site	Yes	Yes	No	No	No	Batteries, fridges, WEEE
Cilgwyn CA Site	Yes	No	No	No	No	Fridges, WEEE
Machynlleth CA Site	Yes	Yes	No	No	Yes	Batteries, fridges, WEEE
Ruthin CA Site	No	No	No	No	No	Fridges, WEEE
Prestatyn CA Site	Yes	Yes	No	No	No	Batteries, fridges
Rhyl CA Site	Yes	Yes	No	No	No	Batteries, fridges
Dock Road CA Site	No	Yes	No	No	Yes	Batteries, fuel, chemicals
Queensferry CA Site	No	Yes	No	No	Yes	Batteries, fridges, WEEE, fuel, chemicals
Flint CA Site	No	Yes	No	No	No	Batteries, fridges, WEEE
Denbigh CA Site	No	Yes	No	No	No	Batteries, fridges, WEEE
Bryn Lane CA Site	Yes	Yes	No	No	Yes	Batteries, fridges, WEEE, fuel, chemicals
Hope CA Site	Yes	Yes	No	No	Yes	Batteries, fridges, chemicals
Globe Way CA Site	Yes	Yes	No	No	Yes	Batteries, fridges, WEEE, fuel, chemicals
Mold CA Site	No	Yes	No	No	Yes	Batteries, fridges, chemicals
Solway Bank CA Site	No	Yes	No	No	No	Batteries, fridges
Wynnstay Banks CA Site	Yes	Yes	No	No	No	Batteries, fridges
Queensway CA Site	Yes	Yes	No	No	No	Batteries, fridges
Llangollen CA Site	No	No	No	No	No	Fridges
Corwen CA Site	No	No	No	No	No	Fridges
Potters Transfer Station	Yes	Yes	No	No	Yes	Fridges, chemicals
GF Potter, Household Waste Recycling Site	Yes	Yes	No	No	Yes	Fridges, chemicals
Gwalchmai CA Site	Yes	Yes	No	No	Yes	WEEE, fridges, chemicals, fuel
Abergele CA Site	Yes	Yes	No	No	Yes	WEEE, fridges, chemicals, fuel
Greenfield Waste Management Park	No	Yes	Yes	Yes	Yes	Acids, alkalines, photochemicals, pesticides, WEEE

<sup>65</sup> Data from Environment Agency Waste Management Licenses and exemptions.

## **Appendix 2**

UDP Waste Policies for each Local Authority in North Wales.

## **Appendix 2a**

Isle of Anglesey County Council (Deposit draft inc. proposed changes)

### **Waste Policy WP1 - Aggregate Recycling.**

**WP1.** Aggregate recycling will only be considered suitable where the surrounding land use is designated for general industrial use, landfill or mineral extraction.

### **Reasoned Justification**

15.56 Aggregate recycling provides an opportunity to divert material away from landfilling whilst having the additional benefit of reducing the environmental impact of quarrying primary minerals. The current lack of suitable facilities for recycling is seen as a constraint and national guidance proposes that local authorities should make suitable provision in development plans for recycling centres that cater for construction and demolition waste.

### **Waste Policy WP2 - Inert Landfill.**

**WP2.** Inert landfill sites will be permitted where :-

(i) that there are benefits in terms of landscape, quarry restoration or agricultural improvement and;

(ii) that the operation will be short term and that there is a proven supply of material to complete the proposals within the given timescale and;

(iii) the additional provision will not prejudice the completion and restoration of existing landfill sites on the Island.

### **Reasoned Justification**

15.57 In certain circumstances, landfilling of inert wastes may be the only realistic option on the basis of Best Practicable Environmental Option. Such waste can be put to beneficial use in the restoration of disturbed landscapes, particularly those of exhausted or worked-out quarries. Through this method, the land may be restored to a beneficial afteruse such as agricultural grazing, managed woodland or other leisure uses.

### **Waste Policy WP3 - Waste Treatment Facilities**

**WP3.** Waste treatment facilities will be permitted where :-

(i) the proposed facility conforms with the principles of the National Waste Strategy; and;

(ii) the facility is totally enclosed where appropriate

(iii) the facility uses the best practicable environmental option and promotes disposal in close proximity to the point waste is generated.

### **Reasoned Justification**

15.58 Waste treatment facilities provide a useful function in the context of current waste management practice. Pre-treatment can reduce the hazardousness of waste or even, in certain cases, render it non-hazardous. The Landfill Directive dictates that most hazardous wastes which are to be landfilled should be pre-treated. Waste

treatment may be proposed for processing various categories of waste - not just hazardous waste. Such sites need to be monitored both for safe practise and to ensure no detrimental impacts on neighbouring areas which can have a variety of amenity and biodiversity interests.

15.58A In planning such facilities best practicable environmental option (BPEO) should be selected and the facility should enable waste to be treated in close proximity to its point of generation.

## **Waste Policy WP4 - Incineration of Waste**

**WP4.** Facilities for the incineration of waste (household, clinical, industrial and special waste) will be permitted where :-

- (i) the development will not give rise to unacceptable detrimental impacts on the local economy and;
- (ii) they are located within an established area appropriate to the development and;
- (iii) they are contained within buildings appropriate to the facility and;
- (iv) they accommodate the recovery of energy.

### **Reasoned Justification.**

15.59 Current guidance recognises the importance of incineration of hazardous organic wastes and other wastes where incineration is the Best Practicable Environmental Option. Energy and heat recovery should be incorporated into such proposals.

## **Waste Policy WP5 - Recycling and Composting**

**WP5.** Land is allocated for the development of a central materials recycling facility (MRF), as proposal AD1 in Gwalchmai.

### **Reasoned Justification**

15.60 The Landfill Directive requires local authorities to recycle or compost 75% of household waste by 2010 as a means of reducing the amount of waste sent for disposal to landfill. The Council's Waste Management Strategy recognises the need to change current waste management practice in order to meet this target.

15.61 As a result, the Strategy advocates recycling and composting as central strands to achieving its objective of reducing waste sent to landfill and recovering value from waste in line with national and European requirements. To this end, the Council has opened a central facility for the recycling of waste.

## **Waste Policy WP6 - Composting-162**

**WP6.** Facilities for the composting of waste (green and mixed) will be permitted where :-

- (i) they are located within an established area appropriate to the development and;
- (ii) the facility is to be located in the open countryside, that the design and scale of the development is in keeping with the surrounding landscape, reuses farm buildings or is in the vicinity of existing farm buildings and;
- (iii) they are part of or within existing waste management facilities.

## Reasoned Justification

15.63 In line with the requirements of national and European requirements relating to composting and recycling a range of facilities will contribute to the effort to achieve targets for composting and signal a move away from current, unsustainable waste management practices. Facilities should not be permitted within 250 metres of the workplace or the boundary of a dwelling, unless the application is supported by an appropriate health risk assessment, identifying that the proposal does not pose an unacceptable risk to human health.

## Waste Policy WP7 - Civic Amenity Sites.

**WP7.** The development of Civic Amenity sites will be permitted in Llangefni (Proposal MD1) and Holyhead (MD2), Amlwch (MD3) and Penhesgyn (MD4).

## Reasoned Justification

15.64 In order to meet Landfill Directive targets, the Council's Waste Management Strategy proposes a future waste collection and disposal service based on recycling and composting. The provision of Civic Amenity sites will allow Island residents to dispose of bulky items and organic waste that would not normally be collected.

15.65 These sites are strategically located to serve the Island's population and will act as 'feeder' sites to the central materials recovery facility. In addition to the proposed sites, the existing Civic Amenity facility at Penhesgyn would be retained and civic amenity capacity increased at the site.

## Waste Policy WP8 - Landfilling or Land Raising

**WP8.** New landfilling or land raising sites, or extensions to existing sites will be permitted where :-

- (i) the additional provision will not prejudice the completion and restoration of existing landfill sites on the Island and;
- (ii) there are no alternatively suitable and more environmentally acceptable methods of waste management and;
- (iii) the existing land use will benefit from restoration following completion of the proposal.

## Reasoned Justification

15.66 Although current sustainable waste management policy guidance signals a move away from landfilling, there will remain a need for limited capacity in order to cater for residual wastes; that is, those wastes that cannot be recycled or recovered on a Best Practicable Environmental Option basis.

15.67 Current landfill facilities for the Island are provided at the Penhesgyn Landfill Site, but capacity will be reached at this site within the Plan period. It will therefore be necessary, having full regard to the Council's Waste Management Strategy, to address this issue and identify a site for future landfill provision once capacity at Penhesgyn has been reached. This is a priority matter for the first review of this Unitary Development Plan.

## Waste Policy WP9 - Special Waste

**WP9.** Proposals for the treatment and disposal of special waste will be considered having full regard to the cumulative capacity available in the region, the capacity to handle or transport such waste and the relevant criteria set out in policies WP3, WP4 and WP7 of this Plan.

## Reasoned Justification

15.68 In considering the proposal for special waste facilities, the Waste Planning Authority will consult fully with external environmental bodies, the Environment Agency in particular, as well as having full regard to the regional capacity for handling special waste streams.

## Waste Policy WP10 - Waste Water

**WP10.** Proposals for the treatment of waste water (sewage) and sewage sludge will be permitted where:-

- (i) the proposal will improve the treatment and discharge quality of the water and also have enough capacity to meet the needs of its catchment area bearing in mind potential development in the future and;
- (ii) the development, where practicable, is suitably located within or adjacent to an industrial area or;
- (iii) the development is located on derelict or degraded land or;
- (iv) any such proposal in the open country, where there is no available industrial or derelict land.

## Reasoned Justification

15.69 The provision of sewage treatment facilities is important to the success of the Plan especially where current facilities are inadequate and hamper or restrict other forms of development, particularly those which meet the Plan's objectives for economic development. Proposals for such facilities will be expected to conform with the criteria set out in Policy GP1. The Council is monitoring and will, where appropriate, support the use of technologies such as reed bed treatment.

## Appendix 2b

Gwynedd County Council (Deposit draft inc. proposed changes)

### **POLICY C21 - PROVISION OF WASTE MANAGEMENT AND RECYCLING FACILITIES**

Land and property listed below will be safeguarded and allocated, and will be shown in the proposals map to sustain or add to the waste management facilities noted in the North Wales Regional Waste Management Plan.

Number	Location	Comments
1	Antur Waunfawr, Cibyn Industrial Estate	Existing facility with possibility for expansion
2	Llwyn Isaf Site, near Pant Glas	Existing facility with possibility for expansion
3	Coed Bolynd Mawr, near Bethel	Existing facility with possibility for expansion
4	Cilgwyn	New allocation – site near present landfill site
5	Penygroes Industrial Estate	New allocation
6	Land near Porthmadog Skip Hire, Porthmadog	New allocation
7	Ferodo site	New allocation
8	Williams & Williams site, Pencaenewydd	Existing facility with possibility for expansion
9	H Parry Composting Site, Chwilog	Existing facility with possibility for expansion
10	Cookes site, Penrhyndeudraeth	New allocation
11	Cef Graianog, Pant Glas	New allocation
12	Bryncir Quarry	New allocation
13	Part of Peblig site, Caernarfon	New allocation
14	Bryn Farm, Y Felinheli	New allocation

**4.4.4 Explanation** - Planning Policy Wales (March 2002) requires UDP's to identify sites for waste facilities or areas where such facilities may be suitable. Many waste treatment and materials recycling facilities that fall within Class B2 of the Town and Country Planning (Use Classes) Order 1987 may be located on sites carrying an identifiable B2 use within local industrial estates without the need for planning permission. For other facilities, which possibly are not suitable to be located near B2 uses because of their nature (e.g. open window composting or certain materials recovery facilities) or because of the type of waste they treat other appropriate sites have been identified on an individual basis.

**4.4.5** Guidance on the level of provision for different types of wastes for the UDPs is provided by the apportionate agreements identified in Regional Waste Plans. The North Wales Regional Waste Plan has identified a number of categories of waste management facility and the Plan's

apportionment indicates a number of additional waste facilities of a given throughput will be required in 2013 in Gwynedd / Snowdonia National Park.

**Table 3 - Gwynedd/Snowdonia National Park Apportionment of waste management facilities**

Type of Facility	Estimated Number Required
1. Materials recycling facility for primary source segregation	3.6
2. Composting – open windrow	1
3. Composting – municipal solid waste	1.4
4. Composting - in vessel	1.4
5. Mechanical biological treatment plant	0.9
6. Energy from Waste plant	0.4
7. Processing/re-use of inert waste	7.4
8. Landfill	[see below]* 0.8
9. Materials recycling facility for non-inert waste	0.2
10. Energy from Waste plant non-inert	0.01
11. Anaerobic Digestion	0.2
12. Civic Amenity Site	0.2
13. Other Transfer Facility	0.65

\* Landfill - At the moment, in terms of landfill capacity Gwynedd is fortunate in having access to two Landfill sites both with considerable potential voidspace remaining.[Gwynedd Waste Strategy Draft 2004], namely Cilgwyn site and Fridd Rasmus site. However the Environment Agency has refused a licence for the continued operation of the Cilgwyn site. An appeal has been lodged. The Cilgwyn site is estimated to have sufficient capacity to be able to operate for 22 – 24 years and the estimated life of Fridd Rasmus is 40 years.

- 4.4.6** An assessment of the area has identified 14 specific sites in the Plan area, that have potential to develop new waste management infrastructure, or for the extension of present waste management facilities (either in terms of scale or range of activities). These have been listed in the policy and are shown on the proposals map. Any proposal that will need planning permission will be required to comply with other relevant policies in the Plan.

#### **POLICY C22 - WASTE MANAGEMENT FACILITIES**

**Proposals for waste management facilities will be approved provided that they are justifiable in terms of the 'Best Practicable Environmental Option'<sup>1</sup> (or the subsequent 'Sustainable Waste Management Option'<sup>2</sup>), the waste hierarchy<sup>3</sup> and the proximity principle<sup>4</sup>, and that they will not have an unacceptable impact on:**

- 1. public health;**
- 2. features of archaeological, architectural and historic importance;**
- 3. the amenities of local residents or neighbouring sensitive uses;**
- 4. areas of nature conservation or landscape interest;**
- 5. local and county-wide employment levels;**
- 6. farming activities and agricultural land quality;**
- 7. water resources; or**
- 8. rights of way and recreational uses.**

**4.4.7 Explanation** – The Council will, in the first instance, give priority to the reduction of waste. However, it is recognised that there is also a significant need to ensure that there is an adequate planning framework in place to facilitate the establishment of appropriate waste management facilities, including recycling facilities. The disposal and recycling of waste are potentially environmentally polluting activities. An area may be too sensitive to justify the development of a waste disposal site within or near it for reasons including the protection of biodiversity, landscape, the rural or built environment, cultural and historic heritage, and the local economy.

**4.4.8** The Planning Authority will have regard to the need to protect the environment, and take into account the preservation of amenity and conservation of resources, the Government's strategy for sustainable waste management and relevant E.C. Directives.

There is not sufficient special or hazardous waste created in Gwynedd to justify a single site to deal with it. It is believed that there could be justification to have a storage facility for hazardous waste, particularly to deal with emergency cases that could arise e.g. in the case of fly tipping. It is considered that the best way forward to deal with this is by providing a special cell within present landfill sites.

**4.4.9** Landfill / landraise sites, and hazardous waste collection / disposal by their very nature are potentially harmful to the environment. Planning permission for landfill / landraise or hazardous waste collection / disposal facilities in areas subject to international nature conservation designation, or on sites which will affect those designated areas, will not be granted. In areas subject to a national designation, waste sites will not be permitted unless there exists demonstrable local need for the facility and clear proof that other options are impractical.

## **LANDFILL AND LANDRAISE**

### **POLICY C23 - LANDFILL / LANDRAISE AND HAZARDOUS WASTE COLLECTION / DISPOSAL SITES**

**Proposals for landfill / landraise and hazardous waste collection / disposal sites will be refused unless all the following criteria can be met:**

- 1. there is demonstrable local need for the site;**
- 2. that the location and scale of the development is appropriate for its immediate surroundings and is compatible with other existing nearby uses;**
- 3. that the size of the site/facility relates to the estimated annual waste input and to the estimated life span of the site;**
- 4. there are no other more suitable alternatives or existing permitted sites;**
- 5. adequate measures for site, restoration and aftercare management have been incorporated into the application;**
- 6. the proposal includes for an acceptable after-use;**
- 7. the proposal contains appropriate measures for the mitigation of the effects of the proposed development;**
- 8. the application is accompanied by a transport impact assessment;**
- 9. the development will not have an adverse impact on nature conservation interests of acknowledged importance, on water resources or drainage regimes.**

**4.4.10 Explanation** - there will be a need for landfill/landraise sites in the foreseeable future. In the context the accepted principles of sustainability, proposals must be fully justified in terms of need. Justification should include an examination of alternative options and have particular regard to the

position of landfill in the hierarchy of waste management.

- 4.4.11** The overall impact of landfill or landraise sites should be minimised and proposals need to be of a scale and duration commensurate with their anticipated input. It must be demonstrated that practical restoration and management measures at any site will be able to minimise effects on the environment.
- 4.4.12** The waste disposal industry in Gwynedd relies entirely on road transport. High intensity road haulage can have a significant effect on the amenity of local residents and cause hazards to road users. The intensity of road haulage generated at a waste disposal site should be limited to a level commensurate with the safe capacity of the road network and the effect of haulage traffic on the amenity of local residents. A Transportation Impact Assessment may be required to accompany a planning application. An Environmental Impact Assessment may be required under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. Within or near to particularly sensitive areas waste disposal site may not be justifiable.

#### **POLICY C24 - INERT WASTE DISPOSAL ON AGRICULTURAL LAND**

**Proposals purported to be for the ‘improvement of agricultural land’ will be approved provided that all the following criteria can be met through the disposal of inert waste will be considered to constitute waste disposal operations and will be considered against the criteria of Policy C23. Proposals will be refused unless the criteria of Policy 23 and all the additional following criteria can be met:**

- 1. the waste material to be used cannot be reused or recycled;**
- 2. there is a demonstrable need for the inert waste disposal site;**
- 3. the land is already used, or is required, for agricultural purposes;**
- 4. there is a need for the quality of the land to be improved;**
- 5. the quality of the land is capable of improvement as a result of the proposal;**
- 6. there will be a long term improvement in the quality of the agricultural land;**
- 7. the development will not have an adverse impact on nature conservation interests of acknowledged importance.**

- 4.4.13 Explanation** - Agricultural land can be improved by land raising using inert waste materials, followed by good husbandry and agricultural practices. The cost of disposal of such waste to landfill has increased with the introduction of landfill tax. The use of inert fill for the improvement of agricultural land does not attract tax, and although they do require registration such operations do not require a Waste Management Licence from the Environment Agency. The improvement of agricultural land to secure exemption from landfill tax payments is not considered to be a good basis for a development plan exception policy. The disposal of inert waste on agricultural land is a waste disposal operation in its own right and can only be properly justified provided it brings with it an identifiable and essential improvement to the agricultural quality of that land. Developers will be expected to provide the waste planning authority with access to records of the type and volume of waste disposed of.

#### **RECYCLING WASTE MATERIALS**

##### **POLICY C25 - RECYCLING FACILITIES INCLUDING SEPARATION, TRANSFER, COMPOSTING AND INCINERATION (WITH OR WITHOUT FACILITIES FOR ENERGY RECOVERY)**

**Proposals for materials recycling facilities including separation, transfer, composting and incineration of waste materials will be approved, provided there is demonstrable local need**

**for the development and that all the following criteria can be met:**

- 1. that the location and scale of the development is appropriate for its immediate surroundings and is compatible with other existing nearby uses;**
- 2. the size of the site/facility relates to the estimated annual throughput of waste to be recycled, treated or incinerated;**
- 3. adequate measures for site management have been incorporated into the application;**
- 4. the proposal contains appropriate measures for the mitigation of the effects of the proposed development;**
- 5. the application is accompanied by a traffic impact assessment.**
- 6. That the development will not have an adverse impact on biodiversity of recognised importance, water resources or drainage regimes.**

**4.4.14** Explanation - Materials recycling facilities including community recycling facilities, waste separation facilities, waste transfer stations, composting facilities, incinerators, with or without energy recovery and waste to energy facilities using fluidised bed or anaerobic digestion techniques are to be encouraged in the interests of sustainability. They must be justified in terms of need and proposals should include an examination of alternatives.

**4.4.15** The overall impact of materials recycling facilities e.g. pollution, noise, environmental impact, safety etc. should be minimised and development proposals need to be of a scale and duration commensurate with their anticipated throughput of materials to be recycled. It must be demonstrated that practical day-to-day management measures and appropriate after-use will be able to minimise effects on the environment, and should include appropriate measures for the control of vermin, smell and harmful emissions

**4.4.16** The waste disposal industry in Gwynedd relies entirely on road transport. The intensity of road haulage generated by a facility that recycles materials should be limited to a level commensurate with the safe capacity of the road network and the effect of haulage traffic on the amenity of local residents. Where applications are likely to have a significant effect on the environment, road safety, local amenities and biodiversity, a Traffic Impact Assessment and/ or the results of an Environmental Impact Assessment will be required under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. It may not be possible to justify the provision of material recycling facilities within or near to sensitive areas.

## Appendix 2c Conwy County Borough Council (Draft)

### POLICY CF19

**THE COUNTY BOROUGH COUNCIL WILL SUPPORT WASTE MINIMISATION INITIATIVES IN ACCORDANCE WITH THE PRINCIPLES OF SUSTAINABLE WASTE MANAGEMENT, PROVIDED THE DEVELOPMENT DOES NOT CAUSE ANY ADVERSE IMPACT ON THE LOCAL ENVIRONMENT.**

11.62 THERE ARE CURRENTLY VARIOUS SCHEMES FOR THE COLLECTION OF MATERIALS FOR RECYCLING WITHIN THE COUNTY BOROUGH. RECYCLING REDUCES THE NEED TO DISPOSE OF MATERIALS IN LANDFILL SITES, WHICH EXTENDS THE LIFESPAN OF CURRENT SITES. IT ALSO HAS IMPORTANT ENVIRONMENTAL EFFECTS BY REDUCING DEMANDS ON NON-RENEWABLE RESOURCES. THIS POLICY ALLOW FOR PROPOSALS WHICH ENCOURAGE RECYCLING, BOTH BY RESIDENTS OF THE COUNTY BOROUGH AND LOCAL BUSINESSES. THE LANDFILL DIRECTIVE WILL HAVE AN IMPACT ON THIS AS IT REQUIRES PHASED DIVERSION OF LARGE AMOUNTS OF WASTE FROM LANDFILL TO OTHER MANAGEMENT METHODS. AS 93% OF WASTE IN WALES IS LANDFILLED IT WILL BE A CHALLENGE TO REACH TO TARGET OF 35% BY 2020 SET BY THE EUROPEAN UNION.

11.63 It is worth noting that the Chartered Institute of Public Finance and Administration have recently published statistics for the year 1998/9 which records Conwy as having the highest recycling rate in Wales at 17.44% (the second highest being 11.05%). The average figure for Wales was 6.32% and 12.04% for unitary authorities in England.

Policy cf20

**THE DEVELOPMENT OF LAND FOR THE DISPOSAL OF WASTE WILL BE PERMITTED SUBJECT TO:**

- 1. THE PROPOSAL SATISFYING A LOCAL NEED FOR SUCH A FACILITY WHICH COULD NOT BE MET THROUGH EXISTING OR PERMITTED WASTE DISPOSAL SITES;**
- 2. ALTERNATIVE METHODS OF WASTE DISPOSAL HAVING BEING CONSIDERED BEFORE USING THE OPTION OF LANDFILL;**
- 3. THE PROPOSED SITE HAVING SATISFACTORY ACCESS AND THE EXISTING LOCAL HIGHWAY NETWORK CAN ACCOMMODATE THE EXPECTED TRAFFIC VOLUME;**
- 4. THE SUBMISSION OF SUFFICIENT DETAILS AND INFORMATION, INCLUDING DESIGN, PHASING, RECLAMATION, AFTER-USE AND OTHER MITIGATION MEASURES, TO SATISFY THE LOCAL PLANNING AUTHORITY THAT THE PROPOSAL WOULD MAINTAIN OR ENHANCE THE VISUAL AMENITY OF THE AREA IN THE LONG TERM;**
- 5. THE LOCATION HAS REGARD TO THE HEALTH AND AMENITY OF NEIGHBOURING LAND USERS; AND**
- 6. THE OPERATIONS WILL NOT SIGNIFICANTLY HARM THE CHARACTER AND AMENITY OF THE AREA.**

11.64 Conwy County Borough Council is responsible for some of the waste functions within the County Borough and has a duty to collect and dispose of household/municipal waste. It also has powers to collect and dispose of commercial waste and wastes arising from construction and industrial sources. Powers are contained in the Control of Pollution Act 1974 and the Environmental Protection Act 1990. It has a further duty to provide sites for households to dispose of excess household waste at Civic Amenity sites (Civic Amenities Act 1974). Such sites permit the collection and disposal of domestic waste not collected by the regular refuse collection service and

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[helps reduce ad-hoc dumping \(fly-tipping\)](#). Responsibility for the environmental regulation of waste disposal sites, including the prevention of pollution, is vested with the Environment Agency.

[11.65](#) A Waste Management Strategy is currently being prepared for the County Borough and this should ensure the adoption of good waste management practices for the County and set out the agenda for the future. Good waste management is important as it has environmental, social and economic benefits and a waste strategy for Wales is currently being proposed which provides a more strategic approach. Land use planning has an important role to play in ensuring that the appropriate infrastructure is in place to deliver such as strategy.

11.66 Waste treatment and disposal facilities can harm the amenity of surrounding land uses, due to factors such as loss of visual amenity, noise, dust, odour and flies. They can also cause health concerns to nearby occupiers. Such considerations will be a factor in determining the location of new facilities, together with the effectiveness of measures that are proposed to mitigate any detrimental impacts on amenity. The National Assembly's Guidance in Planning Guidance (Wales): Planning Policy, expects local planning authorities to work closely with the Environment Agency, in order to ensure that the planning and pollution control regimes are implemented in a complementary way. It also advises that the planning system should not normally be used to secure objectives achievable under other legislation. The impact of waste disposal and treatment on amenity can be mitigated, for example, through effective landscaping, restoration and aftercare. In order to enable such proposals to be assessed, the planning application should be supported by appropriate details, including:

- The maintenance and improvement of visual amenity through strategic and local landscaping;
- Progressive restoration to agriculture, forestry or amenity use;
- Aftercare of the landscaping and restoration for a period of not less than 5 years following the completion of all restoration operations; and
- Where practicable to carry out the development in phases, details of phasing.

POLICY CF21

**LAND IS SAFEGUARDED, AS SHOWN ON THE PROPOSALS MAP, FOR THE DEVELOPMENT OF BRON Y NANT ROAD, MOCHDRE AND LAND ADJOINING LLANDDULAS LANDFILL SITE AS WASTE MANAGEMENT SITES.**

11.67 This policy relates to both public and private sites, and is intended to indicate locations where waste deposit sites would be acceptable. In considering these criteria when deciding planning applications for such a land use, the potentially damaging effects to the landscape, environment, nature and general amenity of the area should be avoided or at least minimised.

11.68 It is currently proposed to relocate the Materials Reclamation Facility at Maesdu Road, Llandudno to Bron y Nant, Mochdre where some facilities already exist, including a composting scheme. Also, a Waste Management Park is proposed for the old quarry site at Llanddulas which will include facilities for collected recyclates, a composting scheme and a forward staging area for residual waste.

[11.69](#) In addition to this, the Council is actively reviewing its waste strategies in the light of European Union waste directives, where a whole range of associated issues are under consideration. All proposals will be subject to consultation, environmental assessment and the full demands of the planning and licensing approval processes.

## **Appendix 2d**

Denbighshire County Council (Adopted)

### **Policy MEW 11 – Waste Management Facilities**

**WASTE MANAGEMENT INSTALLATION WILL BE PERMITTED PROVIDED THAT:**

- i) THE INSTALLATION IS THE BEST PRACTICABLE ENVIRONMENTAL OPTION;**
- ii) THERE IS AN ACKNOWLEDGED NEED FOR THE PROPOSAL IN ACCORDANCE WITH THE WASTE HIERARCHY;**
- iii) THE PROPOSAL SATISFIES THE PROXIMITY PRINCIPLE;**
- iv) THERE IS NO UNACCEPTABLE HARM TO THE AMENITY OF LOCAL RESIDENTS BY VIRTUE OF NOISE, DUST, VIBRATION, ODOUR, DISTURBANCE OR DANGER;**
- v) THERE IS NO UNACCEPTABLE HARM TO FEATURES OF LANDSCAPE, ARCHAEOLOGICAL, HISTORIC OR ARCHITECTURAL IMPORTANCE, AREAS OF BIODIVERSITY OF THE NATURAL ENVIRONMENT, PROTECTED SITES AND SPECIES OR AREAS OF RECREATIONAL IMPORTANCE;**
- vi) THE PROPOSAL DOES NOT UNACCEPTABLY HARM THE CHARACTER AND APPEARANCE OF THE LANDSCAPE, ESPECIALLY THE AONB, AOB, LLA's OR HISTORIC LANDSCAPES;**
- vii) THE LAND IS NOT OF AGRICULTURAL QUALITY GRADE 1, 2 OR 3A;**
- viii) THE PROPOSAL IS ACCEPTABLE IN TERMS OF ACCESS ARRANGEMENTS AND HIGHWAY SAFETY;**
- ix) THERE IS NO UNACCEPTABLE HARM ON LAND DRAINAGE AND WATER RESOURCES;**
- x) THE PROPOSAL HAS A HIGH STANDARD OF LANDSCAPING;**
- xi) THE PROPOSAL INCLUDES AN ACCEPTABLE, APPROPRIATE AND BENEFICIAL AFTER USE SCHEME FOR THE PROPOSAL AREA.**

**FACILITIES FOR INCINERATION NOT INVOLVING ENERGY RECOVERY AND LANDFILL WILL ONLY BE CONSIDERED AFTER THE PROVISION OF FACILITIES FOR WASTE MINIMISATION, THE RECOVERY AND RECYCLING OF WASTE, AND THE RECOVERY OF ENERGY FROM WASTE HAVE BEEN CONSIDERED.**

The Council will seek to manage waste disposal in accordance with the hierarchy and proximity principles outlined in Government guidance. As all waste generated within the County is presently exported to landfill sites, provision is made for waste management installations to be established within the County.

The disposal or treatment of waste in any form is often a controversial issue, no matter how well managed. It is important therefore that any proposals of this type are conditioned to mitigate and/or abate environmental detriment and nuisance.

### **Policy MEW 12 – Disposal of Special Waste**

**DEVELOPMENT PROPOSALS, REQUIRING PLANNING PERMISSION, FOR THE DISPOSAL OF SPECIAL WASTE WITHIN THE COUNTY WILL ONLY BE PERMITTED IN EXCEPTIONAL CIRCUMSTANCES.**

Special waste is that which can give rise to a public health risk by virtue of its toxicity or hazardous nature. The Council currently exports all special waste to a number of suitably licensed sites outside of the County. It is not proposed to identify any such sites within the County.

## **Appendix 2e** Flintshire County Council (Deposit draft)

### **Policies - Waste**

#### **EWP6 Managing Waste Sustainably**

**Proposals for new waste management facilities will be rigorously tested to ensure that:**

- a. facilities are provided to manage waste arising from Flintshire;**
- b. facilities are well located to existing or planned waste management facilities and fit in well with the overall Flintshire waste management infrastructure;**
- c. facilities seek to deal with waste as close to the generation source as is practicable;**
- d. facilities should utilise waste in accordance with the waste hierarchy seeking to ensure the maximum benefits of reusing waste are achieved while minimising damage to the environment and;**
- e. the development will utilise the existing transport network and will not have an adverse impact on the local road network. Traffic will be restricted to operating during appropriate hours of the day.**

19.24 Sustainable waste management presents a major opportunity for the economy to minimise costs, to maximise the use of resources and to enhance the quality of the environment. To realise the potential of sustainable waste management the role of the Local Planning Authority will be to facilitate the provision of an infrastructure capable of treating waste materials arising from Flintshire. It will be important that proposals for new waste management facilities seek to use waste appropriately, ensuring that the full potential of waste resources is optimised in an efficient, and environmentally acceptable way.

19.25 A key consideration for all proposals will be the Waste Hierarchy. The waste hierarchy is a sequential test that can be applied to proposals for the treatment, processing and/or disposal of waste to ensure waste is used in the most efficient and practical way possible. For example the waste hierarchy encourages the reuse and recycling of waste materials, followed by less preferred options such as incineration with energy recovery. The very last option in the waste hierarchy is landfill. Disposal to landfill will not be permitted unless all other options have first been considered.

19.26 Proposals for new waste facilities, disposal sites etc., will be expected to have full regard to the waste hierarchy to demonstrate that waste is to be used in the most efficient and environmentally acceptable way. In determining applications the Council will assess schemes to ensure they represent the best practical environmental option (BPEO). Schemes seeking to dispose of waste through incineration will not be permitted unless they are accompanied with proposals for energy generation.

19.27 In considering proposals for new waste management facilities it will be a key consideration for developers to demonstrate that new facilities are intended to facilitate waste primarily arising from Flintshire. Proposals intended solely to facilitate waste from outside of Flintshire will not be permitted.

19.28 In locating new waste management facilities significant weight will be given to the 'proximity principal' and the need to locate facilities close to the source of waste generation.

19.29 The principal text which will influence waste management within Flintshire is the Flintshire Waste Management Plan (FWMP). Currently being prepared by the Council. The FWMP will define the County's approach detailing the number, type and general location of waste facilities required to meet local needs. The UDP will seek to facilitate these local needs by locating facilities sensitively to avoid loss of public amenity, and to avoid detrimental impacts of the development on the environment.

#### **EWP7 Control of Waste Development and Operations**

**Proposals for new waste management facilities will be permitted provided the following criteria are met:**

- a. the development does not detract from the natural beauty of the Clwydian Area of Outstanding Natural Beauty, the Dee Estuary or Halkyn Mountain;**
- b. the development does not either directly or indirectly detract from the value of recognised features of the**

landscape, sites of nature conservation value, and/or sites/localities of historic archaeological and/or architectural importance;

- c. the land is not agricultural grade 1,2 or 3a;
- d. the development does not detrimentally affect the health and amenity of neighbouring land users, does not significantly affect residents quality of life and does not harm the economic attractiveness of a locality;
- e. the movement of traffic to and from the site does not pose an unacceptable disturbance to local communities either through noise, smell, vibration, smoke, air pollution and/or other traffic related nuisance;
- f. measures are included within the proposals to mitigate the adverse impacts of any waste developments including appropriate landscaping and screening, and the safeguarding or repositioning of public rights of way; and
- g. a detailed scheme of restoration is submitted together with a proposal for an appropriate and beneficial after-use.

19.30 Waste management and the operation of waste disposal sites can have significant impacts on the use or enjoyment of land. This policy is designed to control the location of proposals for waste incinerators, landfill sites, or facilities for waste transfer, materials recycling and reprocessing. The first priority in managing waste should be to reduce the quantities produced or alternatively to encourage ways of recycling and re-use at source which should be encouraged where they are economically feasible. Only waste that cannot be managed through such means should be dealt with centrally, or disposed of through incineration (with energy recovery) or landfill.

19.31 This policy seeks to encourage the expansion of alternative uses of waste which, in addition to environmental benefits, can help keep the costs of industry down and protect local jobs. In supporting the development of an integrated network of waste installations and disposal facilities the Council will encourage the application of the 'proximity principle', under which waste should be disposed of close to the point of production, thereby minimising the impacts of associated transport. The ultimate aim will be to achieve regional self sufficiency.

19.32 In such circumstances great care should be taken to ensure that any processes do not have a detrimental impact on quality of life, or the environment, and that any affected land can be fully restored once the operation ceases. Adequate measures will be taken to avoid, reduce or remedy as far as practicable, pollution from effluent, leachate or landfill gas. In particular, where provision is made for the extraction of landfill gas from waste disposal sites, the design of the scheme must ensure that the presence of gas pipes and collection points does not prejudice the restoration and after-use of the site.

#### **Other key policies:**

- GEN6 Environmental Assessment

#### **EWP8 New Development and Waste Management Facilities**

**Proposals for commercial and residential developments will not normally be permitted unless provision is made by the developer for recycling/composting facilities. The Policy will apply to the following developments:**

- a. housing proposals of more than 40 units;
- b. new developments, redevelopment or refurbishment of shopping centres or facilities where the net floorspace of existing and new development amounts to 500 square metres net or more;
- c. business, industrial, distribution or storage development involving a net increase in floorspace of 500 square metres or more;
- d. major transport, leisure, recreation, tourist, or community facilities;
- e. public car parks in excess of 100 spaces; and
- f. smaller developments that frequently attract a significant number of people (community or shopping schemes).

19.33 Reusing and recycling waste materials has many environmental advantages over traditional methods of disposal. Apart from the reduced risk of pollution from leachate, landfill gas or incinerator emissions, there can be significant energy savings in waste recycling.

19.34 This policy aims to encourage the provision of new recycling and composting facilities, particularly in locations which are used by large numbers of people on a daily basis. To this end all major retail premises, leisure facilities, such as cinemas and sports centres, and large new housing developments should make provision for well designed and accessible recycling and/or composting points. Large town centre car parks may also be appropriate locations.

19.35 It is essential that all new facilities are designed to minimise vandalism, risk of injury, litter and general disturbance. Planning applications should include full details of associated landscaping, which should be designed to mitigate the visual and aural impact of the site on the surrounding area.

#### **EWP9 Reusing Development Waste**

**Wherever possible it will be required that proposals seek to minimise the waste generated through the development process and seek to dispose of the waste in accordance with the requirements of the Waste Hierarchy.**

19.36 The landfilling of on site building wastes puts significant pressure on landfill sites and reduces space available for other wastes (e.g. household waste). This policy seeks to reduce this pressure on landfill by minimising the amount of waste created by development activities by encouraging the use of these resources within new developments. The reuse of old building materials can be incorporated into new designs with little effort, for example the use of stone, concrete and brick wastes in building foundations, roads, pavements and car parks and the use of chipped slate wastes in landscaping.

#### **EWP10 Development On or Adjacent to a Landfill Site**

**Proposals on sites that are on or adjacent to either active or former landfill sites will normally be allowed if they comply with the following requirements:**

- a. an appropriate investigation must be undertaken to determine the actual or potential presence of landfill gases, leachates and/or other pollutants on the land to be developed; and**
- b. preparatory groundworks and suitable remedial and/or precautionary measures are approved prior to the primary development beginning.**

19.37 This policy is intended to ensure that any landfill gas problems on a site are investigated and taken into account when development proposals are being considered. If landfill gas is or may become a problem on the site to be developed, suitable remedial or precautionary measures would need to be implemented before the development begins. It is essential that appropriate professional advice is sought.

19.38 The Council, as the local planning authority, may ask for relevant additional information about landfill gas to be obtained either when an application for planning consent is being considered by the Council, or later by the imposition of an appropriate condition on the relevant planning permission.

19.39 Under the Town and Country Planning General Development Order 1988 (as amended), the Local Planning Authority is required to consult Waste Disposal Authorities (now Waste Regulation Authorities) on development within 250 metres of a landfill site, either active or closed within the last 30 years. Particular attention will be paid to developments affecting such sites.

- plans should include strategic policies on the location of potentially polluting developments and should set out criteria by which applications will be determined;
- plans may set out policies and proposals to ensure that incompatible uses of land are separated, in order to avoid conflict;
- plans should make realistic provision for the types of industry or facility that may be detrimental to amenity or conservation interests, or a potential source of pollution

## Appendix 2f

Wrexham County Borough Council (Adopted)

Policy MW12 : Waste Facilities

**Waste management facilities will be located having regard to:-**

- a) the best practicable environmental option;
- b) the waste hierarchy;
- c) the proximity principle.
- d) regional self-sufficiency.

**With the exception of landfilling, windrow composting or small-scale collection and recycling points, facilities for sorting, transferring and processing of waste will be permitted within sites on general industrial estates.**

**11.14** The County Borough supports the Government's aim of achieving a more integrated and sustainable approach to waste management, including waste minimisation. With this in mind, this policy defines the key principles to which the Council expects developers to adhere. The best practicable environmental option in that which provides the most benefits or the least damage to the environment as a whole at acceptable cost in the long term as well as the short term. The waste hierarchy consists of: reduction (reducing the generation of waste at source and the use of natural resources); re-use: (products and materials may be re-used again for the same or a different purpose); recovery: composting and recycling (value can be recovered from waste through recycling and composting); recovery: energy from waste (value can be recovered from energy generation); safe disposal: (landfill or incineration without energy recovery). Incineration should only be used where all the other methods listed above cannot be adopted, and it is prohibitively impracticable or environmentally harmful to treat the waste in any other way. The proximity principle (the treatment of waste at or near to its source) aims to ensure that waste management problems are not exported from one area or region to another and recognises that the transportation of waste can have a significant environmental impact on itself. The implementation of Policy MW12 will follow closely Planning Policy Wales Technical Advice Note (Wales) 21 – 'WASTE' – published in November 2001. Further contexts will be provided by guidance and policies to be set out in a Regional Waste Plan and in the detail of Waste Strategies that will be prepared.

**11.15** The new waste management facilities needed to comply with Regional Waste Plan targets will largely be provided by the private sector. In the absence of detailed site requirements, no specific allocations have therefore been made in the Unitary Development Plan. However the scale, complexity, and operational characteristics of modern waste management facilities are substantially the same as that of manufacturing industry. Accordingly, the most appropriate location for sorting, transferring and processing wastes, including in-vessel composting, are on those industrial estates which are suitable for general employment development. These locations would include the sites allocated for employment purposes under Policy E1 but exclude those safeguarded for high quality employment under Policy E2. Certain types of waste management facilities are unsuited to an industrial estate location by reason of space requirements (e.g. windrow composting), incompatibility with adjoining uses (e.g. landfilling) and inconvenience to communities (e.g. small-scale collection and recycling points. Sites for these facilities will therefore be permitted outside industrial estates, although compliance with the criteria set out in Policy MW12 will still be required. Landfilling proposals will need to comply with Policy MW13. Windrow composting is more suitable on farms as part of farm diversification.

Policy MW13 : Waste Disposal

**The disposal of wastes will take place:-**

- a) through landfilling of controlled wastes at sites with existing planning permissions; or

- b) at the source where the wastes are produced, subject to any necessary on-site treatment; or**
- c) at purpose-built treatment and disposal facilities which comply with the principles set out in Policy MW12; or**
- d) at sites where the deposit of inert wastes would enable land to be redeveloped.**

New proposals for landfilling of controlled wastes will not be permitted unless there is an exceptional and specific need to manage waste originating from within the County Borough and which cannot be received by existing sites.

**11.16** In order to conserve good countryside, maintain environmental quality standards, and minimise pollution, optimum use must be made of existing waste disposal landfill sites and improved methods of waste treatment. There is already sufficient capacity in existing landfill sites to meet future controlled waste requirements, generated within the County Borough and progress towards more sustainable management methods could further extend the operational lifetime of the currently approved sites. There is, therefore, no justification for permitting further controlled landfill sites within the Plan period.

## **Appendix 2g** **Snowdonia National Park (Adopted)**

### **Disposal Sites**

16.13 Apart from Ffridd Rasus near Harlech, which acts as a centralised disposal site for the southern area of the Park, there are no sites in the National Park which have planning consent for waste disposal. This site currently deals with approximately 23,000 tonnes of domestic and commercial waste per annum. Other small quantities of special wastes are exported to sites outside the National Park for disposal.

16.14 Ffridd Rasus has an estimated life of 30-35 years. Cilgwyn, the other large waste disposal site near Nantlle, which services the northern area of the Park in Gwynedd, has an estimated life of at least 25 years. In addition there are also a number of suitable quarry holes in the immediate vicinity of Cilgwyn which the Waste Disposal Authority has identified for future use when Cilgwyn is full. Conwy waste currently goes to a quarry hole at Llanddulas.

16.15 Given the capacity of these existing sites, the imposition of Landfill Tax and the trend to recycle waste, it is anticipated that the volume and desire to dispose of waste to landfill sites, over the coming years is likely to reduce. In these circumstances the NPA consider that the provision of new disposal sites within the National Park to meet future local requirements will not be necessary during this Local Plan period, and probably beyond.

16.16 With regard to waste not generated within the National Park area, the NPA considers that the importation of waste from outside the locality would conflict with the 'Proximity Principle'. Furthermore if waste importation was undertaken commercially such operations would probably require significant land areas and hence constitute major development unlikely to satisfy the requirements of Policy PC 4.

### **G 1**

*The NPA will not permit the development of new sites for the disposal of domestic or commercial waste whether generated from sources within the National Park or beyond the locality.*

### **Fly Tipping, Civic Amenity Sites and the Disposal of Japanese Knotweed**

16.17 Fly tipping and the abandonment of cars is a problem at certain locations. Where enforcement action under the planning system is not possible, the NPA will urge Waste Disposal Authorities to clear and dispose of tipped materials appropriately.

16.18 The NPA recognise that there will continue to be a requirement for the disposal of inert and civic amenity wastes from development sites and household sources. The bulky nature of this type of material, could lead to the dual use of existing domestic refuse disposal sites thereby using up their capacity more rapidly than planned. This would ultimately increase the pressure for the premature release of new landfill sites or the development of alternative facilities for the disposal of this controlled waste, for instance through incineration. This development would be contrary to Policy G 1 and potentially very harmful to the amenity of Snowdonia. As an exception to Policy G 1 however, the NPA will consider proposals to develop small sites for the disposal of local inert wastes. The NPA will not support the development of any sites on land which is of nature conservation, archaeological or landscape importance, identified on the Proposals Map. Likewise the NPA will consult the EA regarding the use of any sites proposed for tipping to ascertain the hydrological implications of development.

16.19 The NPA is aware that the unauthorised disposal of material contaminated with Japanese Knotweed has assisted in the rapid spread of this invasive species along water courses, road verges, and on derelict sites throughout the National Park. A major cause of the problem has been identified as earth moving activities associated with construction works including road improvement schemes and flood defence works. Any material contaminated with Japanese Knotweed is a 'waste', (unless it is treated for re-use) and there is a statutory requirement to dispose of it properly. The NPA acknowledge that the present lack of appropriate licenced disposal facilities within the Park is likely to encourage the unauthorised disposal of contaminated material with potentially serious implications for the ecology of the Park. Where the control of Japanese Knotweed is not feasible in situ the present lack of appropriate facilities will make disposal extremely restrictive to developers. The disposal of

Japanese Knotweed will continue to pose a major problem in the Park, and one which is likely to increase during the Plan period. The NPA will therefore permit the development of appropriate sites within the Park for the controlled disposal of Japanese Knotweed.

## **G 2**

***As an exception to Policy G 1, the NPA will permit proposals for civic amenity disposal sites for the disposal of locally generated inert waste or waste contaminated with Japanese Knotweed, where the developer can show that the proposal can meet all the following criteria :-***

- i) It is not located on a statutory site of nature conservation interest, geological interest or within a Section 3 Area,***
- ii) The site has no significant historical, archaeological, amenity or recreational value,***
- iii) It is part of a scheme to reclaim derelict industrial land or enhance a non industrial site. (The nature of the proposed afteruse would have to be acceptable to the NPA),***
- iv) The proposal will not lead to the pollution or contamination of the site or neighbouring property, adjacent watercourses, groundwater resources, or involve the raising of ground levels within a flood plain,***
- v) The site is unobtrusive or can be screened to the satisfaction of the NPA,***
- vi) The operation of the site does not create a significant nuisance or inconvenience to the amenity of neighbouring properties,***
- vii) The proposal does not necessitate the improvement of a road access to the site, which is likely to detrimentally affect the landscape character of the area,***

***Any site fulfilling these criteria will be subject to an agreed operational time limit. The developer will be required to submit, for the written approval of the NPA, details of the proposed afteruse, restoration, landscaping and post closure aftercare and management of the site. In certain circumstances the NPA will require the developer to deposit a bond as guarantee that the site will be satisfactorily restored.***

***The NPA will expect a developer to submit an Environmental Impact Assessment with an application for a new or extended disposal site. If this is not required by the EA regulations, the NPA will request sufficient supporting material to assess the impact of the development on the local environment.***

## **Recycling of Waste**

16.20 The Waste Disposal Authorities presently operate various schemes for the collection of materials suitable for recycling. Local community recycling initiatives e.g. collecting glass, aluminium, steel, plastics and paper, reduce the need for the disposal of domestic waste thereby prolonging the operational life of landfill sites and delaying the opening of new ones. Recycling waste also has the additional environmental advantage of extending the life of everyday products, minimising pollution and helping to limit the rate of depletion of non renewable resources. The NPA will therefore support, in appropriate locations, the change of use of land and its development for the provision of facilities to collect recyclable materials.

16.21 Although the NPA supports the collection of waste material generated in the area for recycling it would not support the development of an industrial scale recycling plant in the Park. A commercially scaled development is likely to require a large unsightly storage area, the construction of processing facilities and will generate significant additional traffic movements. Small scale community based schemes, such as scrap yards, building salvage materials and high value low bulk recycling processes are not considered likely to have a serious impact if they are sensitively located (see also Policy C 4, Hazardous and Bad Neighbour Development).

## **G 3**

***The NPA will refuse the development of large scale processing facilities for the recycling of materials, which involve significant traffic movements or large unsightly storage areas.***

***The NPA will however permit small scale processing operations of high value low bulk products, so long as the development is located in either a converted building or on a site in close proximity to a settlement where it will not significantly harm the residential amenity or the landscape character of the Park.***

## Disposal of Special Waste

16.22 Waste that is dangerous or difficult to treat or dispose of is termed 'Special Waste' and includes waste from industrial processes such as dangerous chemicals, radioactive wastes, contaminated clinical waste or any compound which could cause harm to humans or the environment. The volume of special wastes arising in the National Park is very low and is not expected to increase significantly during the period of this Plan. All existing special wastes are currently exported from the National Park for disposal at licensed sites.

16.23 Following the closure of Trawsfynydd Nuclear Power Station there will be a requirement to dispose of intermediate and high level radioactive waste materials. Intermediate level waste consists of solid and liquid materials such as fuel rod casings, residues from gas filters along with sludges from effluent treatment systems. At the present time however there is no facility in the UK for the disposal of high level radioactive waste. This means that this material will require safe storage in the interim period until such a facility becomes available. The change of use of the station from a generating plant to a storage facility for such materials constitutes development requiring planning permission.

16.24 The NPA does not accept however that the material arising from the station's decommissioning should be disposed of permanently in the National Park. The facility which would be required for permanent disposal would itself likely to be of a scale which constitutes major development and of a nature which is incompatible with National Park purposes. The NPA therefore considers that the site should be cleared as soon as is practicable and not used as a permanent store for radioactive waste. As an exception to Policy PC 4 applications for the temporary storage of intermediate level waste will be determined in relation to Policy G 4

16.25 The disposal of any inert material arising from the decommissioning process will be considered in relation to Policies G 2 and G 3 and the NPA will require the removal of this and any other waste material to be transported off site via the existing railway line and in accordance with Policy TR 17.

### **G 4**

*As an exception to Policy PC 4, the temporary storage of accumulated intermediate level radioactive waste at the site of the former Trawsfynydd nuclear power station will be permitted where both the following criteria are satisfied:*

- i) No national repository or alternative means of storing the waste is available;*
- ii) No waste other than that generated at the former Trawsfynydd nuclear power station will be stored on the site.*

*The Authority will attach conditions or seek planning obligations to ensure that the use remains temporary and ceases, with the radioactive waste removed, once a national repository becomes available.*

## Appendix 2h

Powys County Council (Deposit draft inc. proposed changes)

### UDP SP11 - WASTE MANAGEMENT

AS DETAILED IN THE PUBLISHED REGIONAL WASTE PLANS AND WASTE MANAGEMENT STRATEGY AND RECYCLING PLAN, THE PROVISION OF AN INTEGRATED AND ADEQUATE NETWORK OF WASTE MANAGEMENT FACILITIES IS SUPPORTED. ALL DEVELOPMENT PROPOSALS SHOULD INCORPORATE SUSTAINABLE PRINCIPLES FOR WASTE MANAGEMENT PROCESSES. PROPOSALS FOR DEVELOPMENT WILL BE ASSESSED SEQUENTIALLY AS TO WHETHER THEY WOULD:

- i. REDUCE THE CREATION OF WASTE;
- ii. RE-USE WASTE;
- iii. RE-CYCLE OR RECOVER WASTE;
- iv. CONVERT WASTE TO ENERGY;
- v. DISPOSE OF WASTE TO LANDFILL WITH MINIMUM ENVIRONMENTAL IMPACT

PROPOSALS FOR SITES AND FACILITIES THAT WOULD RE-USE, RE-CYCLE, RECOVER, TREAT OR SAFELY DISPOSE OF WASTE WILL BE REQUIRED TO DEMONSTRATE THAT THEY ARE THE MOST SUSTAINABLE OPTION.

13.2.2 It is very much the case that this plan supports the Regional Waste Plans and the comprehensive Waste Management Strategy and Recycling Plan (including future revisions) and provides the land-use planning base for the identified actions. The strategic minerals development policy aims to facilitate the necessary extraction of minerals and safeguard valuable resources whilst ensuring that environmental impacts are minimised. In line with Welsh Assembly Government guidance, as outlined below, the strategic waste management policy seeks to ensure that waste management is carried out in the most sustainable manner practicable.

### 13.3 National Planning Policy and Guidance

13.3.1 Minerals Planning Policy Wales (MPPW) was published in December 2000. It sets out the general policy of the Welsh Assembly Government in respect of the winning and working of minerals. Further, more detailed, guidance in respect of aggregates is published in Minerals Technical Advice Note (MTAN) 1: Aggregates (2004) although there is no equivalent for coal yet. MPPW (Para. 10) states that the key principles for minerals are to:

- Provide mineral resources to meet society's needs and to safeguard resources from sterilisation.
- Protect areas of importance to natural or built heritage.
- Limit the environmental impact of mineral extraction.
- Achieve high standard restoration and beneficial after-use.
- Encourage efficient and appropriate use of minerals and the re-use and recycling of suitable materials.

13.3.2 Technical Advice Note (TAN) 21 in respect of Waste, November 2001, provides advice on how the land use planning system should contribute to sustainable waste resource management. It provides guidance and exhortation in respect of various Directives in respect of waste from the European Commission and establishes new regional waste planning forums across the principality. Powys is the only county to be split between two regions (Montgomeryshire is in North Wales and Brecknockshire and Radnorshire are in the SE Wales grouping). The Regional Waste Plans were endorsed by the County Council in February 2004 and their contents have been taken into account in the preparation of this plan. Reference is made to their main conclusions in the Waste section of this chapter.

### 13.4 General Policy for Mineral and Waste Development

13.4.1 The following policy provides the principle general development control context for all mineral and waste proposals. It should be read in conjunction with specific policies found elsewhere in this chapter and with the other policies of the Plan. It should also be noted that developments of this type might require an Environmental Impact Assessment (E.I.A.) These are the subject of their own regulations and take into account cumulative impact. Section 3.8 of this plan considers the link between E.I.A. and this plan in greater detail.

## **POLICY MW1 - MINING AND WASTE DISPOSAL**

PROPOSALS FOR THE MINING OF AGGREGATES, STONE, COAL, OR METAL ORES OR THE RECYCLING, COMPOSTING, TRANSFER OR DISPOSAL OF WASTE WILL BE PERMITTED WHERE THE FOLLOWING CRITERIA CAN BE FULLY MET:

1. ALL PROPOSALS WILL BE EXPECTED TO INCLUDE A SATISFACTORY VEHICULAR ACCESS ONTO THE PUBLIC ROAD NETWORK AND THAT ACCESS SHOULD CONFORM TO THE CRITERIA SET OUT IN POLICY MW13.
2. PROPOSALS SHOULD NOT INVOLVE THE USE BY VEHICLES OF HIGHWAYS THAT ARE OF A RESIDENTIAL OR TOWN CENTRE CHARACTER, HAVE RESTRICTED FACILITIES FOR THE PASSING OF VEHICLES OR INCLUDE STEEP GRADIENTS OR SUBSTANDARD JUNCTIONS.
3. OPERATIONS, EXCLUDING MAINTENANCE AND OTHER WORKS ESSENTIAL FOR SAFETY AND POLLUTION CONTROL, SHOULD TAKE PLACE ONLY BETWEEN THE FOLLOWING HOURS:
  - MONDAYS TO FRIDAYS - 08.00 AM AND 18.00 PM.
  - SATURDAYS - 08.00 AM AND 13.00 PM.
  - SUNDAYS, BANK AND PUBLIC HOLIDAYS – NO OPERATIONS SHOULD TAKE PLACE.EXCEPTIONS WILL ONLY BE PERMITTED WHERE IT CAN BE CLEARLY DEMONSTRATED THAT THEY CAN BE UNDERTAKEN IN COMPLIANCE WITH POLICY MW14 (NOISE), POLICY MW15 (REVERSING ALARMS), THERE WOULD BE NO SIGNIFICANT LIGHT POLLUTION OR ADVERSE IMPACT UPON RESIDENTIAL PROPERTY AND THERE WOULD BE NO GOODS VEHICLES ENTERING OR LEAVING THE SITE OUTSIDE THE STATED HOURS.
4. PROPOSALS WILL BE EXPECTED TO INCLUDE MEASURES TO ENSURE THAT DUST EMISSIONS WOULD BE WITHIN ACCEPTABLE LIMITS PARTICULARLY HAVING REGARD TO THE PROXIMITY OF RESIDENTIAL PROPERTY AND/OR COMMERCIAL UNDERTAKINGS CARRYING OUT OPERATIONS OF A DUST SENSITIVE NATURE. WASTE DISPOSAL OPERATIONS SHOULD DEMONSTRATE HIGH STANDARDS OF LITTER CONTROL.
5. PROPOSALS WILL BE EXPECTED TO INCLUDE FULL AND ADEQUATE PROVISIONS FOR THE PREVENTION OF POLLUTION TO WATERCOURSES OR GROUNDWATER. IT IS ANTICIPATED THAT SUCH PROVISIONS WILL INCLUDE FACILITIES FOR THE TREATMENT OF SURFACE WATER RUN-OFF, THE COLLECTION AND TREATMENT OF LEACHATE AND THE CONTAINMENT OF LEAKS OR SPILLAGES OF POTENTIAL POLLUTANTS SUCH AS VEHICLE FUEL.
6. THE OPERATIONS INVOLVED WOULD NOT POSE A SIGNIFICANT RISK TO HUMAN HEALTH, WATER, AIR, SOIL, PLANTS OR ANIMALS.
7. ANY PROPOSAL WHICH WOULD PHYSICALLY DISTURB AQUIFERS, ALTER GROUNDWATER LEVELS OR IMPEDE OR INTERCEPT GROUNDWATER FLOW, WILL BE THE SUBJECT OF CAREFUL EXAMINATION AND PROPOSALS WITH AN UNACCEPTABLE ADVERSE EFFECT WILL BE REFUSED.
8. PROPOSALS WILL BE EXPECTED TO COMPLY WITH THE CRITERIA SET OUT IN POLICY ENV2 IN RESPECT OF LANDSCAPE CONSERVATION AND POLICIES ENV 3-7 IN RESPECT OF NATURE CONSERVATION.
9. ANY PROPOSALS INTERFERING WITH THE NATURAL WATERCOURSE SYSTEMS WILL BE SUBJECT TO CAREFUL EXAMINATION AND THOSE WITH AN UNACCEPTABLE IMPACT WILL BE REFUSED. PROPOSALS WILL NEED TO ADDRESS THE NEED FOR MAINTENANCE ACCESS TO ALL WATERCOURSES AND THEIR CAPACITY TO ACCOMMODATE INCREASED RUN-OFF AND PUMPED DISCHARGES. PROPOSALS THAT INCLUDE THE CULVERTING OF NATURAL WATERCOURSES WILL NOT NORMALLY BE ACCEPTABLE.
10. ANY PROPOSAL INTERFERING WITH PUBLIC RIGHTS OF WAY WILL BE THE SUBJECT OF CAREFUL EXAMINATION AND PROPOSALS THAT INCLUDE THE INTERRUPTION OF PUBLIC RIGHTS OF WAY WILL BE EXPECTED TO PROVIDE ALTERNATIVE ACCEPTABLE LINES FOR SUCH AND PROPOSALS HAVING AN UNACCEPTABLE ADVERSE IMPACT WILL BE REFUSED.
11. ANY PROPOSAL THAT INVOLVES THE LOSS OF NATURAL FLOOD PLAIN, EVEN FOR A TEMPORARY PERIOD/S, WILL BE THE SUBJECT OF CAREFUL EXAMINATION AND PROPOSALS HAVING AN UNACCEPTABLE IMPACT WILL BE REFUSED.
12. PROPOSALS SHOULD COMPLY WITH THE TECHNICAL POLICIES MW13 – MW22 AND ALL OTHER RELEVANT POLICIES SUCH AS MW8 ON BLASTING.

### Appendix 3

Table A2: Infrastructure Capacity Requirement for each Authority (Hybrid Option 2013)

Types of Facility	Capacities Required for Individual Authorities						
	Anglesey	Conwy	Denbighshire	Flintshire	Gwynedd	Powys	Wrexham
MRF	35,448	51,804	38,103	95,771	53,757	25,990	82,415
Open windrow composting plant	4,702	6,635	4,917	13,286	7,128	3,465	11,304
MSW composting plant	9,405	13,269	9,834	26,572	14,255	6,929	22,608
In-vessel composting plant	9,405	13,269	9,834	26,572	14,255	6,929	22,608
MBT plant	38,076	52,960	44,265	109,217	55,945	33,474	100,692
EfW plant	15,323	21,920	19,252	42,044	21,947	13,463	39,890
Facility for processing/re-use of inert waste	131,019	209,030	172,352	343,647	219,419	100,227	281,866
Landfill	39,022	60,024	48,679	112,266	61,697	31,199	97,506
MRF for non-inert waste	1,836	1,836	1,799	6,913	2,595	1,435	5,757
EfW plant for non-inert waste	612	612	600	2,304	865	478	1,919
Anaerobic digestion plant	612	612	600	2,304	865	478	1,919
CA site	5,000	3,000	9,000	6,000	4,000	0	15,000
Other transfer facilities	5,000	52,000	39,000	26,000	26,000	25,000	24,000
<b>TOTAL</b>	<b>295,460</b>	<b>486,970</b>	<b>398,234</b>	<b>812,896</b>	<b>482,728</b>	<b>249,067</b>	<b>707,484</b>