DO WE NEED TO IDENTIFY MORE SITES TO MANAGE THE CITY’S WASTE?

Plymouth Plan topic paper

Waste
Do we need to identify more sites to manage the city's waste?

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What is this topic paper about?

Do we need to identify more sites to manage the city’s waste?

This topic paper has been published as part of Plymouth Plan Connections. It is one of a series of topic papers that are being published to provide information and support ongoing discussions with local people and organisations about the future of the city.

This Topic Paper deals with the issue of how we should deal with Plymouth’s waste up to 2031, it looks at how much waste of various kinds will be created in the city up to 2031 and whether the Plymouth Plan needs to identify any sites to handle that waste.
Introduction

Plymouth is a city with a radical growth agenda, driven by its ambition to become one of the finest most vibrant waterfront cities in Europe where an outstanding quality of life is enjoyed by all its citizens. Since 2004, with the publication of the ‘Mackay vision’\(^1\), it has been set on a course which will see the city grow by over 20%, to a population of in excess of 300,000, founded on economic growth. But the agenda is not one of growth for growth’s sake. Instead, the city understands that growth of the right type and quality will build upon the city’s unique cultural, heritage and environmental assets, to deliver the facilities and services that will help drive and sustain its economy, meet the needs of its people for homes and services and enable its people to enjoy health and a strong sense of wellbeing. The agenda is therefore one to deliver high quality and sustainable growth.

To deliver, accommodate and provide for this level and type of growth the Council is producing the Plymouth Plan. The Plymouth Plan will not only be Plymouth’s development plan, replacing the Core Strategy and its current Waste Development Plan Document, but also a single strategic plan for Plymouth.

This Topic Paper summarises the results of the Waste Needs Assessment which has recently been completed and is published alongside this paper. The Waste Needs Assessment is a factual examination of how much waste of various kinds is likely to be produced in Plymouth by 2031, and whether any new facilities are required to deal with that waste. It is therefore key evidence underpinning the waste planning policies to be set out in the Plymouth Plan.

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Current Situation – What does the Waste Development Plan Document say?

The Waste Development Plan Document (DPD), adopted in 2008, sets out the policies for the management of waste within the city in order to deliver the city’s waste strategy, and allocates sites to accommodate the waste needs identified. The Waste DPD explains how Strategic Objective 13 of the Core Strategy is to be delivered. There are two key elements of the Waste DPD:

- It identifies infrastructure required to deal with Plymouth’s solid municipal waste.
- It addresses requirements to deal with other waste streams, for example Commercial and Industrial Waste, Construction and Demolition Waste, and Hazardous Waste which were highlighted through the evidence base.

The Waste DPD identified a number of sites in order to meet these needs:

- Proposal W1 – Coypool China Clay Works- a 6 hectare site for strategic waste facilities.
- Proposal W2 – Land West of Ernesettle Lane – a 8 hectare site for strategic waste purposes.
- Proposal W3 – Moorcroft Quarry – A site for the Construction and Demolition Waste.
- Site Policy W4 – Chelson Meadow- A site identified for Household Waste Recycling Centre and Recycling facilities.
What has changed since 2008?

In reviewing the approach set out in the Waste DPD, there are two key changes which the Plymouth Plan will respond to:

- Changes in Government policy
- The results of a refreshed Waste Needs Assessment

Additionally, the city’s waste strategy is currently being refreshed and any outcomes from this review will need to be incorporated into the Plymouth Plan.

New National Policy

There are a number of key drivers and changes to government policy, both at European and national level since 2007. One key piece of legislation is the European revised Waste Framework Directive 2008 (rWFD). This legislation raises the priority of the Waste Hierarchy (see below) which sets out the way in which society’s waste should be handled. It illustrates the concept that waste should be seen as a resource, and that in handling the production of waste, society should first concentrate on preventing the creation of waste in the first place, before then looking to reuse and then recycle before even considering the use of recovery methods or disposal to landfill. This is a statutory guiding principle for waste management.

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2. The Waste Hierarchy

Using less material in design and manufacture. Keeping products for longer; re-use. Using less hazardous materials

Checking, cleaning, repairing, refurbishing, whole items or spare parts

Turning waste into a new substance or product. Includes composting if it meets quality protocols

Includes anaerobic digestion, incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste; some backfilling

Landfill and incineration without energy recovery

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2 DEFRA Waste Hierarchy Guidance June 2011
Planning for Sustainable Waste Management (PPS10) (2014)

The Government’s ambition for waste management as set out in the Waste Management Plan for England 2013 relies on the adequate provision of new waste management facilities of the right type, in the right place at the right time.

The updated national waste planning policy: Planning for sustainable waste management \(^3\) sets out a ‘plan led’ approach for sustainable waste management emphasising the need to increase the use of waste as a resource, placing greater emphasis on the prevention and recycling of waste, while protecting human health and the environment, while reflecting the principles of proximity and self-sufficiency.

The updated guidance advises, under paragraph 3, that Waste Planning Authorities should identify sufficient opportunities to meet the needs of their area for waste management. Planning policies should:

- Drive waste management up the waste hierarchy (as identified above);
- Identify the tonnages of municipal, and commercial and industrial, waste requiring management in their area;
- Consider the need for additional waste management capacity of more than local significance and reflect any requirement for waste management facilities identified nationally;
- Take into account any need for waste management, including for the disposal of residues from treated wastes, arising in more than one waste planning authority area but where only a limited number of facilities would be required;
- Work jointly with other waste planning authorities, through the statutory duty to co-operate, to provide a suitable network of facilities, where it would be economically and environmentally feasible to do so;
- Consider the extent to which existing, and consented waste management capacity not yet operational, would satisfy any identified need.

Duty to Cooperate

The Duty to Cooperate was introduced in the Localism Act in 2011. It requires local authorities to work together to consider cross boundary issues which should be addressed through their plans.

Plymouth City Council has been working closely with its neighbouring authorities to develop an approach to a ‘larger than local’ policy statement covering Plymouth and surrounding areas, and progress which has been made on this topic is set out in the ‘Larger than Local’ Topic Paper. In terms of Waste planning issues, the key authorities that Plymouth has cooperated with are Devon County Council and Cornwall Council.

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The City Council has worked closely with Devon County Council on the development of their Waste Plan which has recently passed through examination, in order to understand any cross boundary waste movements and particularly on the issue of Incinerator Bottom Ash (IBA) which is discussed below.

Cross boundary waste movements to Cornwall have been an issue in the past as Plymouth has been an exporter of its municipal waste to landfill in Cornwall. With the opening of the North Yard energy from Waste plant in 2015, this movement will cease and Plymouth will no longer be sending municipal waste to landfill.

The City Council will continue to cooperate with its neighbours over waste issues throughout the development of the Plymouth Plan, and will be working with them to understand the findings of the Waste Needs Assessment.
Waste arisings in Plymouth up to 2031

The Waste Needs Assessment 2014

The Plymouth Plan will ensure that the waste needs of the city are fully understood, and that if required there are sufficient sites to manage those waste needs. The government has a general policy objective requiring that Local Authorities are self-sufficient in managing their own waste, but it is recognised that waste streams do not respect local authority boundaries, and that this is not always achievable.

Another key driver outlined in government policy is the proximity principle. This policy has the objective of ensuring that waste management takes place where facilities are closest to the source of waste. This policy requires that where waste arises there is sufficient infrastructure delivered at the right time, right place and the right type. This is a corner stone of the plan led system.

As a result the Plymouth Plan will need to take into account the level of waste arisings forecast to occur through to 2031 and ensure that sufficient sites are available and deliverable to accommodate this need. The City Council has therefore developed evidence setting out how much waste will be produced in Plymouth over the plan period up to 2031.

The Waste Needs Assessment provides comprehensive data on the amount of waste generated in Plymouth, the capacity of existing and planned treatment facilities, cross boundary waste movements, and future needs. This Topic Paper provides a summary of the key findings in relation to future need.
Plymouth’s Future Needs

In order to ensure that there is sufficient capacity of waste management facilities through to 2031 in Plymouth forecasting and modelling has taken place. As with all modelling this has been based on a set of growth assumptions. These are detailed in the Section 4 of the Need Assessment report and provide high, medium and low growth forecasts. The needs assessment has suggested that the medium growth scenario best fits the growth aspirations on the city over this period.

<table>
<thead>
<tr>
<th>Waste Stream</th>
<th>2012</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2031</th>
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<tbody>
<tr>
<td>Municipal Waste</td>
<td>126,654</td>
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<td><strong>Commercial and Industrial Waste</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Growth Scenario</td>
<td>157,000</td>
<td>164,980</td>
<td>177,731</td>
<td>191,466</td>
<td>209,358</td>
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<td>Medium Growth Scenario</td>
<td>157,000</td>
<td>161,757</td>
<td>170,009</td>
<td>178,681</td>
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</tr>
<tr>
<td>Low Growth Scenario</td>
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<td>155,402</td>
<td>159,327</td>
<td>163,350</td>
<td>168,312</td>
</tr>
<tr>
<td><strong>Construction and Demolition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Growth Scenario</td>
<td>732 346</td>
<td>765 798</td>
<td>824 982</td>
<td>888 740</td>
<td>971 787</td>
</tr>
<tr>
<td>Medium Growth Scenario</td>
<td>732 346</td>
<td>732 346</td>
<td>732 346</td>
<td>732 346</td>
<td>732 346</td>
</tr>
<tr>
<td>Low Growth Scenario</td>
<td>732 346</td>
<td>689 278</td>
<td>623 053</td>
<td>563 190</td>
<td>498 898</td>
</tr>
<tr>
<td><strong>Hazardous Waste</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Growth Scenario</td>
<td>5 436</td>
<td>5 684</td>
<td>6 124</td>
<td>6 597</td>
<td>7 213</td>
</tr>
<tr>
<td>Medium Growth Scenario</td>
<td>5 436</td>
<td>5 601</td>
<td>5 886</td>
<td>6 187</td>
<td>6 567</td>
</tr>
<tr>
<td>Low Growth Scenario</td>
<td>5 436</td>
<td>5 518</td>
<td>5 657</td>
<td>5 800</td>
<td>5 976</td>
</tr>
<tr>
<td><strong>Agricultural Waste</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Growth Scenario</td>
<td>11 506</td>
<td>11 506</td>
<td>11 506</td>
<td>11 506</td>
<td>11 506</td>
</tr>
<tr>
<td>Waste Stream</td>
<td>2012</td>
<td>2015</td>
<td>2020</td>
<td>2025</td>
<td>2031</td>
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<tr>
<td>Medium Growth Scenario</td>
<td>11,506</td>
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<td>11,506</td>
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<td>11,506</td>
</tr>
<tr>
<td>Low Growth Scenario</td>
<td>11,506</td>
<td>11,506</td>
<td>11,506</td>
<td>11,506</td>
<td>11,506</td>
</tr>
<tr>
<td>Low Grade Radioactive Waste</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Growth Scenario</td>
<td>1,032,942</td>
<td>1,078,324</td>
<td>1,157,559</td>
<td>1,242,768</td>
<td>1,351,823</td>
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<tr>
<td>Medium Growth Scenario</td>
<td>1,032,942</td>
<td>1,041,565</td>
<td>1,056,963</td>
<td>1,073,178</td>
<td>1,092,051</td>
</tr>
<tr>
<td>Low Growth Scenario</td>
<td>1,032,942</td>
<td>992,060</td>
<td>936,759</td>
<td>888,305</td>
<td>836,651</td>
</tr>
</tbody>
</table>

Table 1: Future Need Assessment (Source: Amec Future Waste Needs Assessment 2014)

Each of the waste streams set out in the table is assessed below, including a description of how the waste is currently handled and how this might continue through the life of the Plymouth Plan.

**Municipal Waste**

The Municipal Waste Stream (i.e. the waste that is under the control of the Council) is broadly split into waste that will be reused, recycled and composted and residual waste that requires final treatment and/or disposal. The Table below outlines the forecast waste capacity which will be managed by The Council through to 2031 based on the assumption that no additional initiatives or interventions are introduced other than what is currently known and underway within the Council; i.e. additional interventions proposed as part of the Council’s current Municipal Waste Management Strategy review have yet to be taken into account in these figures.

<table>
<thead>
<tr>
<th></th>
<th>2012/13 (actual)</th>
<th>2013/14 (actual)</th>
<th>2015/16</th>
<th>2020/21</th>
<th>2025/26</th>
<th>2030/31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total municipal arisings (rounded)</td>
<td>125,293</td>
<td>124,153</td>
<td>128,500</td>
<td>136,000</td>
<td>142,500</td>
<td>150,000</td>
</tr>
<tr>
<td></td>
<td>2012/13 (actual)</td>
<td>2013/14 (actual)</td>
<td>2015/16</td>
<td>2020/21</td>
<td>2025/26</td>
<td>2030/31</td>
</tr>
<tr>
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<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Assumed Recycling / Composting % (baseline)</td>
<td>37.7</td>
<td>36.8</td>
<td>40.0</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Tonnage Recycled / Composted</td>
<td>47,262</td>
<td>45,688</td>
<td>51,500</td>
<td>54,500</td>
<td>57,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Residual Requiring Final Disposal</td>
<td>78,031</td>
<td>78,465</td>
<td>77,000</td>
<td>81,500</td>
<td>85,500</td>
<td>90,000</td>
</tr>
</tbody>
</table>

**Table 2: Identifying the Municipal Waste Stream (Amec Future Waste Needs Assessment 2014)**

As is usual for any administrative area, not all the waste that is managed by and under the control of Plymouth City Council will be dealt with within its administrative boundary due to the need for specialist facilities, economies of scale, suitability of sites and the investment needed in such infrastructure.

In terms of the capacity of Council procured infrastructure to manage municipal waste arising’s within Plymouth there are two key municipal waste treatment facilities alongside other smaller facilities that receive and sort waste. These treatment facilities are:

The North Yard Energy from Waste Plant, which will have a capacity of 245,000 tonnes per annum, and was procured in partnership with Devon County Council and Torbay Council as the South West Devon Waste Partnership (SWDWP). This residual waste treatment facility is due to become fully operational in 2015.

The Materials Recycling Facility (MRF), at Chelson Meadow, Viridor has been awarded a 10-year contract to upgrade and operate a materials recycling facility (MRF) at Chelson Meadow on behalf of Plymouth City Council. The facility will be capable of managing up to 25,000 tonnes per annum of co-mingled dry recyclate in a single shift or around 40,000 tonnes on a doubled shift and will become operational in April 2015.

It should be noted that in assessing the capacity of the city to handle its municipal waste, the city’s current forcast municipal recycling and composting rate without further intervention of 40% is used as a baseline. The current refresh of the waste strategy will consider options to significantly increase these rates, and the actions and interventions needed to make this happen.

**Recycled and composted municipal waste**

As can be seen from the table 2, “Identifying the municipal waste stream”, the Council projects that around 60,000 tonnes of municipal waste will be recycled and composted in 2030 based on current initiatives. The waste stream primarily consists of comingled dry recyclable material along with recycled wood, composted garden waste and soil and rubble used as hard-core.
Commingled dry recycling makes up the largest proportion of the Council’s recycling/composting tonnage forecast and, as set out above, the Council has procured a new 25,00 tonne capacity MRF which will adequately fulfil its forecasted capacity need. This capacity can be increased if required.

At present the Council relies on wood recycling being undertaken outside the city but a new biomass facility under construction at Belliver in the city could fulfil this treatment capacity in the future if needed.

Garden and green waste composting is also undertaken outside the city boundary on nearby farms and this is projected to continue as such composting cannot readily be accommodated at any sites within the city due to the need to have sites a stipulated distance from inhabited buildings and dwellings.

Soil and rubbles collected by the Council is a smaller fraction and is generally delivered to either inert landfill sites outside the city or used for infil and hardcore locally – this disposal methodology is projected to continue.

Residual municipal waste

Table 3 identifies the contractual obligations the EfW plant has to accommodate residual waste from Plymouth. This ranges from 80,035 tonnes per annum to 93,506 tonnes in 2031.

<table>
<thead>
<tr>
<th></th>
<th>2041/2015</th>
<th>2020</th>
<th>2025</th>
<th>2031</th>
<th>2038</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total EfW Feed:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plymouth</td>
<td>80,035</td>
<td>82,667</td>
<td>87,428</td>
<td>93,506</td>
<td>101,189</td>
</tr>
<tr>
<td>% of total contract</td>
<td>47.5</td>
<td>47.6</td>
<td>48.4</td>
<td>49.3</td>
<td>49.8</td>
</tr>
<tr>
<td>Torbay</td>
<td>29,031</td>
<td>28,890</td>
<td>29,763</td>
<td>30,849</td>
<td>32,169</td>
</tr>
<tr>
<td>% of total contract</td>
<td>17.2</td>
<td>16.6</td>
<td>16.4</td>
<td>16.3</td>
<td>15.8</td>
</tr>
<tr>
<td>Devon Total</td>
<td>59,363</td>
<td>62,299</td>
<td>63,628</td>
<td>65,163</td>
<td>69,807</td>
</tr>
<tr>
<td>% of total contract</td>
<td>35.3</td>
<td>35.8</td>
<td>35.2</td>
<td>34.4</td>
<td>34.4</td>
</tr>
<tr>
<td>Total Contact Waste as per MVV Contract</td>
<td>168,428</td>
<td>173,856</td>
<td>180,820</td>
<td>189,518</td>
<td>203,165</td>
</tr>
<tr>
<td>Third party waste capacity</td>
<td>76,572</td>
<td>71,144</td>
<td>64,180</td>
<td>55,482</td>
<td>41,835</td>
</tr>
</tbody>
</table>

It is estimated that 90,000 tonnes per year of municipal waste from Plymouth will need to be disposed of in 2031, and Plymouth City Council has contractually forecast over 93,000 tonnes capacity available at the EfW plant at North Yard. The Waste Needs Assessment therefore concludes that the EfW plant will be able to accommodate it and therefore no further municipal waste management capacity will be required during the life of the Plymouth Plan for treatment and disposal of residual municipal waste – even taking account of the very cautious and low assessment of the amount of recycling which could take place in the city by 2031.

The Plymouth Plan will therefore not be required to identify any sites for strategic waste purposes.

Residues from Energy from Waste

Although it is anticipated that no additional municipal waste management capacity will be required during the life of the Plymouth Plan, due consideration may need to be given to the management and treatment of any residues from the EfW process at North Yard. These residues are known as incinerator bottom ash (IBA).

The Waste Needs Assessment sets out that the EfW plant is estimated to produce 60,000 of IBA tonnes per year. It is a requirement of the contract for use of the EfW plant and the planning permission which was granted, that the IBA must be handled by the operator. There are 2 key principles set out in the conditions of the planning permission:

- That the IBA must not be sent to landfill. This means that the operator must make provision for the IBA to be recycled in such a way that it can be re-used as a building aggregate. This requirement is repeated in the contract with operator.
- There is an aspiration that this IBA processing operation takes place in close proximity to Plymouth, to allow the aggregate to be used in building projects which support growth in the city.

Currently, there are no IBA processing/treatment facilities in or close to Plymouth which could deliver the aspirational element of the planning permission, so the EfW operator is looking to make alternative arrangements for the re-use of the IBA. The Devon Waste Plan has recently completed its Public Examination phase, and also looked at the issue of how to create a policy framework to handle the IBA issue. The Devon Waste Plan sets out a criteria based policy, which sets out the considerations which Devon will apply to any proposals which come forward for IBA processing operations, and makes clear that the authority will take a positive approach when assessing proposals. This approach seems to make sense given that IBA processing operations do not require large amounts of land, nor do they involve particularly specialist operations or have unusual site requirements (as is set out in the Waste
Needs Assessment). The City Council supported the approach taken in the Devon Waste Plan as set out in a paper prepared for the Examination sessions\(^4\). It is therefore suggested that a similar approach may be appropriate for the Plymouth Plan.

**Question 1**

What should the elements of a new policy on managing incinerator bottom ash be? What type of sites would be suitable for such use?

**Commercial and Industrial Waste**

Commercial and Industrial (C&I) waste in Plymouth in 2012 totalled 157,000 tonnes. Table 1 shows that this is forecast to increase to between 168,000 tonnes and 209,000 tonnes by 2031.

The Waste Needs Assessment shows that there are facilities to handle 81,000 tonnes of C and I waste in Plymouth. The report also identifies that 76,000 tonnes of waste is exported. This is an accepted part of the commercial waste market where waste is transferred to be managed at specialist facilities which are delivered by the market. Plymouth therefore currently manages 52% and exports 48% of its C and I waste stream.

Based on the 52% and 48% pattern of disposal and exportation, given the management is a market led process, it is considered that by 2031 Plymouth will be exporting between 80k and 100k tonnes of C&I waste.

In the context of this need assessment, consideration must therefore be given as to the extent to which the Plymouth Plan should make provision for the portion of the commercial and industrial waste stream which is presently exported, to be handled within the city.

Planning policy guidance requires that consideration is given to the extent to which existing and consented waste management capacity not yet operational, would satisfy the identified need identified above.

As outlined in Table 3, there will be an element of spare capacity for some of the forecasted commercial and industrial waste to be handled at the North Yard EfW facility. This is particularly the case in the early years after the facility becomes operational when there will be more spare capacity, although this will decrease with time (i.e. 77,000 tonnes per annum in 2015 falling to 55,000 tonnes per annum in 2031). This would mean that by 2031, Plymouth would only be potentially exporting between 25 000 and 45 000 tonnes of C&I waste each year.

In addition to the spare capacity at the EfW plant there may be additional capacity at the following waste management installations:

\(^4\) [http://www.devon.gov.uk/ed08_waste_topic_paper_7_addendum_on_incinerator_bottom_ashv2.pdf](http://www.devon.gov.uk/ed08_waste_topic_paper_7_addendum_on_incinerator_bottom_ashv2.pdf)
- Belliver waste wood CHP facility – a 40 000 tonnes per annum facility located within Plymouth, which has been constructed and is now under commissioning.

- Lee Moor Anaerobic Digester – a 75 000 tonnes per annum advanced thermal treatment facility managing organic waste located just outside the administrative boundary of Plymouth, in Devon, and which was given planning consent in 2011, but has yet to be constructed.

- Langage Anaerobic Digestion Plant – a 12,800 tonne per annum facility treating organic wastes such as food to produce energy and digestate (fertiliser).

Even discounting the out of area AD facility, the permitted capacity at Belliver would allow Plymouth to achieve net self-sufficiency in C&I provision based on the low and medium growth scenarios.

It should also be noted that C and I waste is handled and treated by private companies who will make decisions based on the most efficient and economic way to treat the waste they collect. All the Plymouth Plan can do is make provision (if necessary) to give these operations choices regarding the possibility of creating facilities in the city.

It is therefore concluded by the Waste Needs Assessment that sufficient capacity exits for the management of commercial and industrial waste within Plymouth. As such, it is recommended that the Plymouth Plan does not need to identify any additional sites for the treatment/disposal of commercial and industrial waste.

**Construction, Demolition and Excavation Waste**

As identified in Table 1 Construction and Demolition Waste (CDEW) is the largest waste stream within Plymouth. It is predicted by 2031 that there will be arising’s of between 498k and 971k tonnes of CDW waste.

These are very significant numbers. However there are uncertainties surrounding the validity of available arising’s and capacity data. These primarily relate to the lack of Regional/Local Authority data. Allied to this, the fact that large portions of such material never get recorded as ‘waste’ further challenges the reliability of the available data i.e. many building / demolition sites manage CDEW on-site; or where it is taken off-site, it may be used as engineering material on sites not regulated under a waste management permit.

Although the need is expressed as a very large figure there is evidence to question whether this is a need that needs to be accommodated in full through the Plymouth Plan.

Firstly the Future Needs Assessment report indicates that only a small amount of CDEW is actually managed within Plymouth (approximately 36 000 tonnes per annum, of which almost a third (12 000 tonnes) is simply ‘transferred’ rather than treated / disposed). Additionally, the Future Need Assessment report indicates that only approximately 16 000 tonnes per annum of CDEW is exported from Plymouth (which could include all or part of the 12 000 tonnes recorded as being managed at transfer sites within Plymouth. Therefore, the maximum amount of CDEW recorded as being managed within or exported from Plymouth is approximately 52 000 tonnes per annum (36 000 tonnes + 16 000 tonnes).
This means that of the current estimated 732 000 tonnes per annum of CDEW arisings, 680 000 tonnes is going unrecorded. Given the way in which CDEW is generally managed, this is unsurprising. As recognised in the variety of national surveys of CDEW carried out by government in the past, large quantities of material are managed via mobile crushers and screeners on building / demolition sites and / or are taken off site and used as engineering fill on non-licensed sites. Consequently, the vast majority of CDEW never enters the waste market.

It must therefore be assumed that the vast majority of Plymouth’s CDEW (680 000 tonnes per annum), never enters the waste market, but instead is being managed on-site and at unlicensed sites. This assumption is further supported by the fact that there are no strategic CDEW recycling / management facilities in Plymouth; there have been no planning applications for such facilities in the recent past and the existing plan allocation for a CDEW recycling / reprocessing facility at Moorcroft Quarry has never been taken up.

However, given the European and national commitment to maximising the recycling of this waste (a minimum of 70% by weight) and against the background of there being no strategic recycling facilities in Plymouth, in preparing the Plymouth Plan, consideration should be given to as to whether there should be a continued level of plan provision for new construction, demolition and excavation waste facilities (either via the retention of the allocation at Moorcroft Quarry or via the adoption of a positive criteria based policy relating to the types of site where permission for CDEW recycling facilities would be permitted).

**Question 2**

Should the Plymouth Plan continue to identify Moorcroft Quarry as a site to handle CDEW in Plymouth?

**Hazardous Waste**

This waste stream is expected to increase to between just under 6,000 and 7,200 tonnes by 2031. Data has shown that although hazardous waste arisings in Plymouth are only small (in the region of 5,000 tonnes per annum), Plymouth was a net importer of hazardous waste in 2012 (managing a total of approximately 19,000 tonnes per annum). The need for specialist facilities to deal with this waste stream, coupled with the small quantities of hazardous waste generated in Plymouth, would suggest that no new facilities would be required in Plymouth.

**Agricultural Waste**

Agricultural waste arisings are anticipated to remain constant throughout the Plymouth Plan period to 2031. As such, no additional waste management capacity would be required for this waste stream.
Low Grade Radio Active Waste

Given the small quantities of LGR waste arisings in Plymouth and its specialist treatment/management requirements, no specific provision for this waste stream will need to be made in the Plymouth area.
Household Waste Recycling Centres (HWRC)

Plymouth is currently served by two Household Waste Recycling Centres (HWRC) located in the east of the city at Chelson Meadow and to the west of the city at Weston Mill.

Chelston Meadow was fully rebuilt in 2010 and the recycling and composting rate has increased from 41% to 69% (excluding inert waste) in 2012/13.

Policy W6 of the WDP seeks to ensure that sufficient local waste management facilities are provided. In this regard the Policy identifies that accessible waste management facilities are provided in the Northern Area of the City, and identified in the Derriford/Seaton Area Action Plan or Sustainable Neighbourhoods DPD.

Policy 7 of the Municipal Waste Management System (MWMS) of the outlines that Plymouth City Council will continually review HWRC provision to ensure there is sufficient capacity to ensure that there is sufficient capacity to satisfy the service need.

Question 3

Is there still a need to provide a Household Waste Recycling Centre (HWRC) in the north of the City?
Conclusions

The Waste Needs Assessment has come to three clear conclusions, including two issues which the Plymouth Plan will need to come to a view about:

- There is sufficient capacity within the city to handle all municipal waste arisings over the plan period to 2031. There is therefore no need to continue to allocate the sites set out in the Waste DPD for strategic waste management facilities. Therefore, the sites at Coypool and at Ernesettle should no longer be allocated for strategic waste facilities in the Plymouth Plan.

- The Plymouth Plan will need to set out a policy framework to deliver the aspiration to process IBA in or close to Plymouth. It is suggested that this may best be done by setting out a criteria based policy which mirrors the approach set out in the Devon Waste Plan and accepted by the Inspector who examined that plan.

- Whether to continue to identify Moorcroft Quarry as a location for the handling of CDEW.

The Plymouth Plan will also need to set out the Council’s strategic approach to managing municipal waste, through a refresh of the Municipal Waste Management Strategy. The Plymouth Plan, as the Council’s single strategic plan, will need to set out the overarching principles which will then guide the Council’s detailed approach to handling the waste which it is responsible for over the plan period.

Work is underway on refreshing the Municipal Waste Management Strategy, and the outcomes of this work will be published as evidence base to the Plymouth Plan.
What happens next?

Any comments received on this topic paper will be considered in the preparation of the Plymouth Plan. You can make comments at www.plymouth.gov.uk/PlymouthPlan or by email plymouthplan@plymouth.gov.uk. Alternatively, please post your comments to:

Strategic Planning & Infrastructure Department
Plymouth City Council
Ballard House
West Hoe Road
Plymouth
PL1 3BJ

The closing date for consultation responses is 25 October 2014.

List of key Plymouth Plan evidence base documents.

- Plymouth Waste Needs Assessment, AMEC, 2014
- Devon Waste Plan Topic Paper 7, Devon County Council, 2014(6)

5  http://www.plymouth.gov.uk/waste_dpd_4web.pdf
6  http://www.devon.gov.uk/ed08_waste_topic_paper_7_addendum_on_incinerator_bottom_ashv2.pdf