1 Reason for the Report

1.1 The purpose of the report is for Cabinet to consider a change in the Council’s doorstep recycling service provision with a move away from the separation of paper (news and pams) to a fully comingled service where residents would be no longer required to separate and place paper in a clear plastic sack.

2 Recommendations

2.1 It is recommended that Cabinet:

- Approves the move to a fully comingled recycling as proposed by AES;
- Notes the financial and other benefits that are associated with the change; and
- Notes the risks associated with the change and the mitigating actions that AES is proposing to ensure an effective transition.

3 Executive Summary

3.1 Alliance Environmental Services (AES) provides a comprehensive recycling service to households on behalf of the Council. This service includes a dual stream collection of dry recyclables as follows:

- 140l or 240l grey bin for the collection of dry recyclables (cardboard, glass bottles and jars, food and drinks cans, cartons, plastic bottles, tubs and trays),
- A reusable clear bag for the collection of paper (news and pams),
3.2 The Council has been requested by AES to consider replacing the existing arrangements with an alternative fully comingled recycling scheme.

3.3 The existing dual stream recycling operation relies on the value and volume of the separately collected paper for the scheme to be economically viable. Trends associated with the reducing value and volume of collected paper, coupled with the lack of regional recycling facilities, has reduced the economic viability of dual stream recycling.

3.4 Analysis provided by AES shows that moving to a fully comingled recycling scheme could generate significant financial savings in material processing costs. In addition there are vehicle fleet management implications associated with continuing with a dual stream recycling system, which further reduce the economic viability of the scheme. The split body refuse collection vehicles (RCVs) associated with the dual stream system are approximately £35,000 more expensive than a standard RCV required to collect fully comingled recycling. There are also additional maintenance costs associated with split body RCVs.

3.5 AES has also provided details of significant other benefits associated with the move to fully comingled collections which include operational efficiencies, primarily due to the easier collection requirements, and benefits to the customer associated with the reduction in separation of materials. The change would also bring the service in line with that operated in the AES partner authorities’ (High Peak and Cheshire East) areas thus providing opportunities for further operating efficiencies.

3.6 The risks of the change have also been identified and AES has provided details of the actions that are to be undertaken to mitigate these risks.

3.7 After detailed consideration of the proposal it is concluded that the move to fully comingled arrangements is the appropriate way forward.

4. How this report links to Corporate Priorities

4.1 One of the four aims of the Council’s Corporate Plan is “to protect and improve the environment and respond to the climate emergency”. This includes the following objective:

- Effective recycling and waste management

4.2 The successful delivery of this objective will be underpinned by the development of new operating arrangements as outlined in this report.

5. Evaluation of Options

5.1 There are two options available:
• Retain the dual stream recycling arrangements; or
• Move to a comingled arrangements.

5.2 These options are evaluated in detail in the report

6 Implications

6.1 Community Safety - (Crime and Disorder Act 1998)
None

6.2 Workforce
None

6.3 Equality and Diversity/Equality Impact Assessment
None

6.4 Financial Considerations
The evaluation shows that there will be significant financial savings in moving to a fully comingled arrangement. The potential saving is in the region of £275,000 per annum.

There could also be additional savings arising from the operational efficiencies that are associated with the simplified collection arrangements

These savings will make a large contribution to the overall savings required in the Council’s Efficiency and Rationalisation Strategy

6.5 Legal
Although AES is contractually responsible for the delivery of the waste collection service, decisions such as changes to the collection methodology require the agreement of each of the shareholders

6.6 Sustainability
There may be carbon reduction benefits should the travel distances to the recycling facilities be reduced

6.7 Internal and External Consultation
None

6.8 Risk Assessment
There are a number of risks associated with the proposed change in the collection methodology. The key risks are as follows:

• Non-compliance with the emerging national waste strategy
• Comingled waste bin size
• Increased contamination
• Commodity value volatility

More detail on these risks and the proposed mitigation is detailed in section 14 of the report.

ANDREW P STOKES
Executive Director (Transformation) & Chief Finance Officer

<table>
<thead>
<tr>
<th>Web Links and Background Papers</th>
<th>Location</th>
<th>Contact details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moorlands House</td>
<td>Andrew P Stokes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Executive Director &amp; Chief</td>
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<tr>
<td></td>
<td></td>
<td>Finance Officer</td>
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</table>
7 Background and Introduction

7.1 The Council’s Waste and Recycling Service has been operated by the authority’s trading company Alliance Environmental Services (AES) since July 2018. The service operates alongside the service provided by AES to High Peak Borough Council. A key outcome from the establishment of AES was to provide financial savings to the two Councils through the economies of scale.

7.2 The services provided by AES to the Councils are managed through a Commissioning Board on which this Council is represented by the Portfolio Holder for the Environment.

7.3 At the most recent meeting of the Commissioning Board, AES made a request for the Council to consider a change in its doorstep service provision with a move away from the separation of paper (news and pams) to a fully comingled service where residents would be no longer required to place paper in a clear plastic sack. This would allow the company to generate significant financial savings to the benefit of the Council.

7.3 The purpose of this report is to consider this request.

8 Current Service

8.1 Since 2007 the Council has provided a comprehensive recycling service to households as detailed as follows:

- 140l or 240l grey bin for the collection of dry recyclables (cardboard, glass bottles and jars, food and drinks cans, cartons, plastic bottles, tubs and trays),
- A reusable clear bag for the collection of paper (news and pams),
- A single use clear plastic sack for the collection of unwanted clothes and shoes,
- 240l brown bin for the collection of food and garden waste,
- 180l blue lidded bin for the collection of general rubbish.

8.2 For paper, on some rural collection rounds, AES are mixing the collected paper with the comingled recycling from grey bins. This saves them time and money in having to drive part full collection vehicles back to Leek. The material quality is not affected and is still fully recyclable.

8.3 The current methodology has been in place since 2007, the scheme was introduced following a waste compositional analysis conducted in 2005. This identified that some 60% of all waste collected was recyclable; to achieve such performance would be reliant on all households participating and fully recycling all recyclable or compostable waste.

8.4 The Council’s comparative recycling performance is strong. In 2017/18, SMDC was 30th in the national recycling league table of 345 local authorities, making SMDC the highest performing authority in Staffordshire.
8.5 The table below displays the kerbside dry recycling yield for each of the main materials collected (paper, card, cans, glass, plastic bottles, mixed plastic packaging, textiles). The yield for each material is compared against benchmark tables to show in which quartile it resides (as shown by the key). This shows that the level of recycling in the Staffordshire Moorlands is in the upper quartile when compared against other UK authorities, the exceptions being for paper and textiles.

<table>
<thead>
<tr>
<th>Category</th>
<th>Detail</th>
<th>Paper</th>
<th>Card</th>
<th>Cans</th>
<th>Glass</th>
<th>Plastic Bottles</th>
<th>Mixed Plastic Packaging</th>
<th>Textiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffordshire Moorlands District Council</td>
<td>Yield (kg/household)</td>
<td>23.2</td>
<td>43.4</td>
<td>14.1</td>
<td>73.7</td>
<td>19.4</td>
<td>7.9</td>
<td>0.0</td>
</tr>
<tr>
<td>How you compare against other UK Authorities</td>
<td></td>
<td></td>
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<tr>
<td>How you compare against other authorities in the same region</td>
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<td>iWest Drayton</td>
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<tr>
<td>How you compare against other authorities with similar characteristics - ONS area classification</td>
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<td>Country Living</td>
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<tr>
<td>How you compare against other authorities in the same locality</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Rural deprivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of deprivation</td>
<td></td>
<td></td>
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</table>

9 Review of Service delivery

9.1 In order to maintain performance, the Council has regularly reviewed the service provided to residents.

9.2 The most recent review was through a joint waste working group (with councillors from High Peak Borough Council) which was established during 2016/17. This group considered the proposed future service model prior to the transfer of service delivery for both Councils to AES, alongside reviewing collection services and improvements to performance. Site visits enabled members to visit waste management treatment, recycling and composting facilities and other local authorities.

9.3 The final report from this group made a number of suggestions to improve recycling performance including:
• Investigating wider partnership arrangements to create the potential of greater efficiencies from common methodology and to avoid major changes until this has been explored;
• Increasing recycling promotion;
• Investing partnership resources into targeted campaigns, focused upon moving food waste from the residual bin; and
• Using data analytics to focus campaigns on target areas with improvement potential.

10 Resources & Waste Strategy

10.1 The draft Resources and Waste Strategy for England was issued by the Government in late 2018. The Strategy which focuses on many improvements to increase recycling performance primarily via:

• A consistency agenda – to standardise collection services and bin colours across the country to remove confusion for the public,
• The introduction of compulsory services including a weekly food waste collection, which would be paid for by Government or the prevention of services such as chargeable garden waste or three or four weekly collections of general waste,
• A deposit return scheme to encourage the public to recycle more packaging,
• A plastic tax to encourage producers of packaging to use more recycled plastic, thus creating demand for recycled plastics in the UK.

10.2 The strategy is currently being consulted on and the outcome from which is expected during 2020. There is therefore the potential for significant changes proposed by this new strategy for local authorities.

11 AES Arrangements for Dry Recycling Collection

11.1 AES’s request relates to the dry recycling elements of the Council’s current service which is a dual stream service consisting of:

• Stream 1: Commingled recyclate – (cardboard, glass bottles and jars, food and drinks cans, cartons, plastic bottles, tubs and trays); and
• Stream 2: News and pams

11.2 AES’s fleet of refuse collection vehicles (RCVs) for the collection of dual stream recycling is adapted to collect the two separate recyclable materials within a single vehicle. Split body RCVs are required to separate the two different recyclable materials. The split body RCVs are dedicated recycling vehicles and can not be used on alternative services such as residual waste or organic waste collection rounds.

11.3 AES has two separate contracts for the processing of the collected recyclate:
• Comingled recyclate – the contract with Pearce Recycling Ltd for the separation and onward processing of comingled recyclate was novated from the Council and expires on 31st March 2020 with an option to extend up to March 2025. Pearce Recycling is located in St. Albans. The contract includes provision of haulage from the Fowlchurch Waste Depot.

• News and pams – the contract for processing news and pams was also novated to AES from the Council and also expires on 31st March 2020 with an option to extend up to March 2025. The contractor is Palm Recycling and the contract includes haulage of News and Pams to Palm Paper’s mill in Kings Lynn.

11.4 AES’s kerbside collection service operated in High Peak incorporates a fully comingled recycling collection scheme which includes news and pams. The scheme was altered in 2017 to include glass which was previously collected separately. Residents in High Peak utilise a single wheeled bin for collection of the comingled recyclate. The fleet of RCVs used to collect the comingled recyclate in High Peak are standard RCVs and can be used to collect other waste streams.

11.5 AES benefit from a contract with UPM Kymmene for the collection (from the waste transfer station in Buxton), separation and onward processing of all fully comingled recyclate arising from High Peak kerbside waste collections. The contract expires on 13th March 2020 and can be extended up to 13th March 2023.

11.6 UPM have indicated that they would be willing accommodate the fully comingled recyclable materials from Staffordshire Moorlands, should the Council decide to change the service and AES opt for this option – alternatively AES could source alternative contractual arrangements.

12 Current Position – SMDC Dual Stream Recycling

12.1 The key driver for the Council implementing a dual stream recycling system was to achieve higher revenue for a separately collected material. Implementing separate paper collections was in line with many local authorities as paper prices were typically higher thus justifying the separation.

12.2 However the volume and value of the separately collected paper must have a significant differential in order to support the strategy for a dual stream recycling system. It is therefore important to consider two significant trends:

• The volume of separately collected paper within Staffordshire Moorlands is reducing; and
• The value of paper (news and pams) is decreasing.

12.3 The below table outlines the shows the decline in the annual volume of paper collected since the introduction of the service in 2007.
### Yearly Volume of Paper (Tonnes)

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume of Paper (Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/08</td>
<td>3,099.04</td>
</tr>
<tr>
<td>2008/09</td>
<td>2,961.40</td>
</tr>
<tr>
<td>2009/10</td>
<td>2,571.79</td>
</tr>
<tr>
<td>2010/11</td>
<td>2,488.66</td>
</tr>
<tr>
<td>2011/12</td>
<td>2,251.48</td>
</tr>
<tr>
<td>2012/13</td>
<td>2,066.38</td>
</tr>
<tr>
<td>2013/14</td>
<td>1,889.09</td>
</tr>
<tr>
<td>2014/15</td>
<td>1,736.64</td>
</tr>
<tr>
<td>2015/16</td>
<td>1,612.98</td>
</tr>
<tr>
<td>2016/17</td>
<td>1,378.98</td>
</tr>
<tr>
<td>2017/18</td>
<td>1,028.24</td>
</tr>
<tr>
<td>2018/19</td>
<td>847.45</td>
</tr>
</tbody>
</table>

12.4 The price per tonne received for the separated news and pams is also on a downward trajectory. The price is volatile but the downward trend can be illustrated when comparing the price received in August 2018 - £74.26 per tonne with that received in August 2019 - £59.67 – a reduction of 19.6%.

12.5 When considering a future recycling model for SMDC it is important to consider the trends outlined above and how they could influence the feasibility of the model. Importantly, there is no market intelligence suggesting the resale value of news & pams is going to stabilise. It would therefore be prudent to assume similar fluctuations in the value of the material going forward.

12.6 The decrease in volume of separately collected paper could potentially be stymied with a strong communications campaign but consideration must also be given to national trends and the general decline in news print.

13 **Alternative Position – SMDC Fully Commingled Recyclate**

13.1 In order to justify the proposed move to fully commingled recycling service, AES have provided a comparison of the financial implications of the two alternatives. The following assumptions have been applied to the analysis:

- Commingled recycling and news and pams tonnages reflect actual volumes collected between September 2018 and August 2019.
- The recycling composition is based on the latest Pearce Commingled (excluding news and pams) recycling composition. *(Latest composition received August 2019)*
- All of the separated news and pams which is currently sent to Palm Recycling will be included within the fully commingled composition.
Material prices are based on the latest published LetsRecyle.com index prices and applied in accordance with Ansa’s UPM contract mechanisms. *(Latest prices published in August 2019)*

Annual haulage costs based on £17.00 per tonne.

13.2 The table below summarises the estimated total cost:

<table>
<thead>
<tr>
<th>Element</th>
<th>Dual Stream</th>
<th>Fully Comingled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comingled Recyclate (excl. News &amp; Pams)</td>
<td>£376,127</td>
<td>(57,094)</td>
</tr>
<tr>
<td>News and Pams</td>
<td></td>
<td>87,015</td>
</tr>
<tr>
<td>Fully Comingled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>£319,033</td>
<td>87,015</td>
</tr>
</tbody>
</table>

13.3 The above analysis shows that the move to a fully comingled service would realise significant financial savings – approximately £232,000 per annum.

13.4 In addition to the projected savings detailed above, retaining a dual stream recycling system will require significant investment in replacing the existing SMDC fleet of split bodied RCVs when they are at end of life:

- Indicative quotes received provide that an initial purchase cost for the 26 tonne split body RCV to facilitate dual stream recycling collections would be approximately £30,000 more expensive than an equivalent single compartment (standard) RCV. The additional capital cost of six split bodied vehicles would therefore be in excess of £180,000. This would result in an additional annual revenue cost of approximately £26,000.
- Increased maintenance costs associated with the split body RCVs when compared with a standard body RCV used for the collection of fully comingled recycling. A split body RCV is likely to cost an additional £3,000 per annum per vehicle to maintain. This is mainly attributed to the complex dual packing mechanism and compartment dividers. The total additional maintenance cost for all six required vehicles is likely to be £18,000 per annum.

13.5 There are also other benefits from removing split bodied vehicles from the fleet:

- Reduced requirement for different types of spare vehicles;
- Increased utilisation of spare vehicles reducing the total number of RCVs required;
- Reduced supply risk where vehicles breakdown due to recycling collection rounds being covered by standard RCVs;
- Reduced maintenance; and
• Possibility of utilising 32 tonne RCVs for recycling collections in densely populated urban areas, which would help reduce the total number of RCVs required

13.6 There are a number of operational benefits of the proposed change that can be summarised as follows:

• Collection of one receptacle type;
• Increased pay-loads;
• Reduced training (associated with specific operative and driver training on the Split Body RCVs);
• Quicker tip-times – as only one material type is required to be ejected from the vehicle;
• Transfer efficiencies associated with reduced waste storage bays, communicating with a single haulier, handling and loading of one material type, increased payloads etc.; and

13.7 Collection methodology will be the same as High Peak and Cheshire East thus providing a platform for further efficiencies around sharing fleet etc.

13.8 It is considered that residents will benefit from fully comingled recycling collections due to:

• Easier collection service, which could increase the volume of recycling collected;
• Fewer receptacles to store and use; and
• Reduced complaints associated with missed collections and requests for replacement paper sacks.

14 Risks of Change and Mitigation Proposals

14.1 There are a number of risks associated with the proposed change in the collection methodology. These risks have been discussed in detail with AES and are detailed below with the agreed mitigation measures.

*Non-Compliance with the Emerging Waste Strategy*

14.2 The Government’s Resources and Waste Strategy for England sets out preferences for quality recyclable materials collected and consistent set of dry recyclables. Some industry bodies suggest comingled recycling collections reduce the quality of recyclable materials sent for reprocessing. Reverting to fully comingled recycling collections from a dual stream could be seen as a sub-optimal decision contradicting the emerging national strategy.

14.3 The Government’s Resources and Waste Strategy also sets out for investment within England’s waste infrastructure capacity. The existing recyclate re-processing contracts were competitively tendered with the successful contractors offering re-processing facilities located in St. Albans
and King’s Lynn. The location of these emphasises the lack of local re-processing facilities. Should the national Resources and Waste Strategy produce improved access to re-processing facilities in the region then dual stream recycling may become more economically viable. Importantly, after meeting with various national waste companies there are currently no known plans to commission re-processing facilities in the area.

14.4 The conclusion at this stage is that the Resources and Waste Strategy sets out a preference for the collection of quality recyclable materials and it is inferred that this is to be achieved through source segregated recycling collections. The strategy also provides for improved waste infrastructure. These two objectives are interdependent. It could be argued that dual stream recycling collections can not be carried out economically without appropriate infrastructure within the region.

14.5 Initiatives outlined within the Resources and Waste Strategy are due to implemented by 2023. This would be a key date of anticipated changes. Implementing a fully comingled recycling scheme between 2020 and 2023 would potentially yield a total saving of £827,973 over the three year period.

**Commingled Waste Bin Size**

14.6 There would be a potential issue could be the around the size and capacity of the grey wheeled bins. Currently most of these bins are 140litre size and there is a potential that the introduction of paper into the comingled bin would result in this smaller receptacle being insufficient for the marginally increased volume.

14.7 In mitigation of this issue AES have agreed two key actions:

- They are currently undertaking a detailed assessment to determine where there may be issues over the current 140 litre bins being adequate for the proposed change; They are reviewing existing comingling arrangements immediately to understand the composition and volume; They have Identified rounds with high existing recycling rates and are conducting an analysis of their recycling via the crews as well as a door knocking survey which could be extended to cover a larger range of residents – this to take place from mid-January; and importantly
- They have guaranteed the replacement of the bin for a larger one should this be an issue for any resident.

**Increased Contamination**

14.8 In both the Pearce and UPM disposal contracts a basket of goods calculation is undertaken to determine the value of the materials in each load. In this calculation the proportion of comingled recycling containing contamination (residual waste) is chargeable. Consideration needs to be given to the potential of contamination increasing when the collection scheme is altered, which could significantly increase costs.
14.9 However, effective communications and marketing if re-launching the service would be a way to mitigate this. Also it is important to consider that contamination is an issue currently and it will always be prudent to assign resources to reducing contamination within the comingled recyclate.

Commodity Value Volatility

14.10 All existing and proposed recycling solutions link directly to a Commodity Index based on the resale value of separated recyclable materials. This market has been volatile throughout the past two years and continues to provide uncertainty.

14.11 This risk applies to all recycling contracts and pragmatic budget setting needs to consider best and worst case scenarios.

15 Conclusion and Way Forward

15.1 Making changes to the kerbside recycling scheme is a key decision for the Council as it affects a core service directly impacting residents. However the option for the Council to revert to a single stream fully comingled recycling scheme would yield savings of approximately £275,000 per year when compared with the option of continuing with the existing dual stream recycling scheme.

15.2 The risks associated with the change have been clearly identified and mitigation measures will be put in place to ensure an effective transition. It is therefore recommended that the Council accepts AES’s proposed change.

15.3 Whilst the government’s Resources and Waste Strategy outlines preferences for standardised recycling collections in view of achieving better quality recyclable materials through source segregated collections, recycling facilities and infrastructure within the Staffordshire region are limited and compromise the economics associated with maintaining a dual stream recycling scheme. The Resources and Waste Strategy may provide for increased recycling facilities and recycling infrastructure within Staffordshire Moorlands. However, there is no guarantee that this would happen or whether this would happen within the region of Staffordshire Moorlands. There is also no guarantee that improved recycling infrastructure would present a sufficient financial model which would make dual stream recycling collections financially viable.