



Environmental Appraisal of closure of Congleton HWRC

Cheshire East Council
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Executive Summary

Introduction

Resource Futures working with SQ Planning LLP was commissioned by Cheshire East Council (CEC) to undertake an Environmental Appraisal of the potential impacts of the closure of its Household Waste Recycling Centre (HWRC) at Congleton.

Background

In September 2014, CEC produced a Strategic Environmental Assessment (SEA) as part of its Waste Strategy 2030. The SEA assessed the effects of 19 high-level objectives and the waste options contained within the Waste Strategy against 12 key sustainability themes.

The SEA concluded that CEC's Waste Strategy would make a significant positive contribution to sustainable waste management in the Council area because it provided comprehensive and efficient waste management solutions.

For some of the waste options considered, the effects on the environmental and amenity objectives of the SEA were unknown because both the location of the potential new infrastructure and those facilities that would close, were yet to be determined.

This report seeks to review the relevant environmental objectives set out within the SEA Report and provides detailed analysis of the environmental effects associated with the closure of CEC's HWRC located at Congleton.

This assessment should enable CEC to consider the wider sustainability credentials associated with the closure of its existing HWRC at Congleton and its contribution towards the wider delivery of its Waste Strategy.

Impact

This report and environmental assessment found that the majority of the key considerations were unaffected by the proposed closure of the Congleton HWRC. However, it was inevitable that the proposed closure would have some negative impacts that warranted further study and analysis. The table below summarises the findings of the environmental assessment in accordance with the appraisal scoring system contained within the SEA.

Summary of Effect

SEA Objective	Assessment	Impact	Possible Mitigation	Residual Impact
Population & Human Health Material Assets	Transportation	Moderate Adverse	Bring sites. The management of fairer access systems.	Minor Adverse
Air Quality Population & Human Health	Air Quality	Neutral	N/A	Neutral to Minor Beneficial
Climate Factors	Climate Change	Moderate Adverse	Bring sites. Infrastructure Improvements.	Minor Adverse
Population & Human Health	Amenity	Neutral	Signage and CCTV.	Neutral
Employment Social Inclusion	Socio Economic	Minor Adverse	Redeployment and infrastructure improvements.	Neutral
Population & Human Health Material Assets	Future Demand & Recycling	Minor Adverse	Bring sites. The management of fairer access systems. Wider Infrastructure improvements.	Neutral

The table shows that the residual impact of closing the Congleton HWRC is considered to be neutral to moderate adverse, if no mitigation measures are implemented. The table indicates the potential benefits of installing and implementing a range of practical and expedient measures which will reduce the impacts of the closure to **minor beneficial** to **minor adverse**. The adverse impact of the closure focuses on the additional distances that the waste will be transported by residents and the additional carbon that this transportation will generate.

Waste Strategy

The overall impact of the closure must be considered as an integral part of the impacts of the wider Waste Strategy. The **minor adverse** impacts identified by this report will be offset with respect to the following:

- The continued progress of residents to successfully reduce and reuse materials reducing the need to transport them to a HWRC.
- Consideration of onwards travel of the consolidated waste materials from the remaining HWRCs and the economies of scale that bulking of materials generally achieve.
- Optimisation of the existing HWRC sites to ensure they are fully utilised which will avoid increasing the carbon footprint and impacts of local amenity through the provision of a new site.

- The improvement of existing sites leading to an increase in recycling and reuse rates, which would typically have a greater carbon saving than a small additional distance travelled by residents.
- Wider carbon offsetting measures such as the utilisation of hydrogen collection vehicles and Council level carbon offsetting.
- Financial considerations associated with the management and running of the facilities.

Recommendations

This report assesses the worst-case scenario associated with the generation of traffic and usage of the alternate sites after the closure of Congleton. CEC have committed to monitoring the effects of the closure and will investigate the following recommendation measures based on an identified need.

- The provision of signage and CCTV at the Congleton site to deter fly-tipping.
- Investigation into the management of fairer access at the alternate sites such as the extension of opening hours and managed access arrangements.
- The provision of bring sites in locations which are over 8km from a HWRC.
- Investigation into the potential for further upgrades to existing infrastructure.

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1 Introduction

Resource Futures working with SQ Planning LLP has been commissioned by Cheshire East Council (CEC) to undertake an Environmental Appraisal of the potential impacts of the closure of its Household Waste Recycling Centre (HWRC) at Congleton.

1.1 Purpose of this report

In September 2014, CEC produced a Strategic Environmental Assessment (SEA) as part of its Waste Strategy 2030. The SEA assessed the effects of 19 high-level objectives and the waste options contained within the Waste Strategy against 12 key sustainability themes which included:

- Biodiversity, Flora and Fauna.
- Population and Human Health.
- Soil.
- Water.
- Air.
- Climatic Factors.
- Material Assets.
- Cultural Heritage.
- Landscape.
- Employment.
- Deliverability.
- Social Inclusion.

The SEA concluded that CEC's Waste Strategy would make a significant positive contribution to sustainable waste management in the Council area because it provided comprehensive and efficient waste management solutions.

For some of the waste options considered, the effects on the environmental and amenity objectives of the SEA were unknown because the location of the potential new infrastructure and those facilities that may close were yet to be determined.

This report seeks to review the relevant environmental objectives set out within the SEA Report to provide a more detailed analysis of the environmental effects associated with the closure of CEC's HWRC located at Congleton.

This assessment should enable CEC to consider the wider sustainability credentials associated with the closure of its existing HWRC at Congleton and its contribution towards the wider delivery of its Waste Strategy.

1.2 Background Context

CEC has a statutory duty to provide HWRCs free-of-charge and that are reasonably accessible to residents, in a controlled and sustainable manner.

The Council currently operates 8 HWRC's. The sites are managed by ANSA Environmental Services, a company wholly owned by the Council. At each HWRC the site operations are undertaken by HW Martin Ltd and subcontracted Site Managers. The current contract for the delivery of these services ends in 2023.

The current facility in Congleton is on a site that is leased by the Council. The owner of the site has informed the Council that they will not consider a renewal of the lease. The current lease at the site will expire in 2021 and as such the facility will be closed.

Whilst there is an extensive body of work currently being undertaken to prepare for the end of the contract with HW Martin, this assessment considers the environmental impact of the closure of the Congleton site at the end of its lease in 2021.

2 Methodology

This chapter outlines the requirements and general approach followed by this Environmental Appraisal.

2.1 Requirements

The Environmental Assessment of Plans and Programmes Regulations 2004 require a SEA to be carried out when developing strategic 'plans and programmes'. SEA's are mandatory where a plan or programme is required by legislative, regulatory or administrative provisions. Although not required by law, CEC undertook a SEA on the Waste Strategy in line with recommended best practice.

Actions associated with the implementation of a Waste Strategy, be it due to Council decisions or other factors, do not require further assessment under the SEA Regulations.

Notwithstanding this, CEC are committed to assessing the implications of the closure of the HWRC on the environment and local community to inform its wider decision-making process.

The proposal does not include demolition or the development of a new site. An Environmental Impact Assessment (EIA) under the Town and Country Planning Act (Environmental Impact Assessment) Regulations 2017 is therefore not required.

2.2 Consultation

In preparation for a new HWRC contract, Resource Futures were commissioned to undertake a review of the current service provision within CEC and to make recommendations regarding the provision going forward. This research concluded that it would be possible to reduce the number of HWRC's within the Council area without significantly affecting the ability of CEC to provide the required service level.

In November 2020, CEC's Cabinet considered the findings of this review and agreed that a public consultation on the options for the future pattern of provision for HWRC's should be undertaken.

Residents were consulted on the scenarios identified in the review and asked how they felt about the options being considered and what they considered the impact would be on them. Over 10,200 responses were received. Most residents supported the option to keep the current service provision pattern.

Respondents to the consultation were asked to provide comments that the Council ought to consider as part of statutory service provisions. The top themes emerging from the comments concerned the potential risk of adverse environmental impacts caused by the closure of sites, which may increase the incidence of fly tipping, increased carbon emissions from longer journeys, pollution and congestion from queuing to access the other sites in the area, misuse of kerbside bin collections and reduction in recycling rates. Other concerns included the increased time and cost it would take for individuals, especially those of an older age group and the disabled, to travel to an alternate site. It was also perceived that there would be an increase in demand for HWRC facilities due to new houses being built.

These concerns are addressed within this appraisal.

2.3 Existing Baseline

The Council currently operates 8 HWRC's in Alsager, Bollington, Congleton, Crewe, Knutsford, Macclesfield, Middlewich and Poynton.

The subject of this assessment is:

- **Congleton Household Waste Recycling Centre:** Barn Road, off the A536 Congleton to Macclesfield Rd, CW12 1LJ.

The traffic utilising the Congleton HWRC currently access and exit the site via the A34 Clayton bypass.

2.4 Projected Future Scenario

When the HWRC at Congleton closes, the nearest alternative sites for the great majority of the residents will be:

- **Alsager Household Waste Recycling Centre,** Hassall Road, Alsager ST7 2SJ.
- **Macclesfield Household Waste Recycling Centre,** off the A536 Macclesfield to Congleton Rd, Gawsworth, Macclesfield SK11 9QP.

The locations of these sites are identified in Figure 1 below:



Figure 1: HWRC locations

It is assumed that traffic travelling from Congleton to the alternate facilities would be likely to travel via:

- Alsager: A34 Newcastle Road / Congleton Road North; and

- Macclesfield: A536 Congleton Road.

2.5 Timeframes

The key time frames examined within this environmental appraisal have been sub-divided as follows:

- **Short term:** Comprising temporary arrangements made when the Congleton site has been closed.
- **Long Term:** Comprising the permanent arrangement made when the Congleton site has been closed.

Within these broad timeframes, the impact of the changes can be categorised as being direct or indirect as follows:

- **Direct effects** are those that impact on local residents and local businesses.
- **Indirect effects** are those that impact on the remaining HWRC network or wider area.

2.6 Assessment Structure

The SEA for the CEC Waste Strategy 2030 identified key sustainability themes which are relevant to the delivery of the Waste Strategy.

This Environmental Appraisal has identified those themes of relevance and assesses the impact of the closure of the Congleton site against them.

2.6.1 Specific Assessment Criteria

Table 1 below replicates the SEA topics and objectives as established in Table 3.2 in the SEA Report. Some of the SEA topics fall outside the scope of this appraisal as will be identified and justified in section 2.7 of this report.

The table allocates appropriate assessment criteria based on those assessment criteria set out within the SEA, and the comments raised by members of the public outlined in section 2.2 of this report. The environmental assessment of each criterion is presented and discussed in individual chapters under the relevant headings.

Table 1: SEA Framework adaptation

SEA Topic	SEA Objective	Assessment Criteria to establish if the closure of the HWRC at Congleton will:	Report Chapter No
Biodiversity, Flora and Fauna	To protect and enhance biodiversity, habitats, geo-diversity and important geological features from adverse effects of waste development; with particular care to sites designated internationally, nationally, regionally and locally	<ul style="list-style-type: none"> - protect or enhance biodiversity? - help protect any species at risk - protect or enhance geo-diversity and geological sites and features - protect or enhance designated sites or species 	Outside the scope of this report

SEA Topic	SEA Objective	Assessment Criteria to establish if the closure of the HWRC at Congleton will:	Report Chapter No
Population and Human Health	To protect the living conditions and amenities of local residents from adverse effects of waste development, including noise, vibration, dust, odour and traffic effects.	- effect of noise, vibration, dust or odour. - impact on congestion? - impact on time and cost to travel?	Outside the scope of this report 3 (Transport)
	To minimise adverse effects of waste management activity on human health.	- impact on air quality?	4 (Air Quality)
	To protect community safety and well-being.	- impact on fly tipping? - impact on litter?	6 (Amenity)
	To avoid adverse cumulative environmental effects of waste management and associated development on local communities.	- impact on future demand in particular from new housing?	8 (Future demand & Recycling) Cumulative impacts addressed in all chapters
Soil	To protect agricultural resources from waste management activities.	- seek the protection or enhanced use of the best quality agricultural land?	Outside the scope of this report
Water	To protect water quality, quantity and manage flood risk in relation to waste management activities within the Council area.	- seek the protection of water quality and manage flood risk?	Outside the scope of this report
Air	To minimise adverse effects of waste management activity on air quality.	- impact on air quality & pollution?	4 (Air Quality)
Climatic Factors	To minimise the effect of waste management on climate change	- reduce emissions of greenhouse gases, in particular carbon dioxide and methane?	5 (Climate Change)
Material Assets	To reduce the consumption and wasteful use of primary resources and encourage the development of alternatives to primary resources.	- impact on kerbside collections?	8 (Future Demand & Recycling)

SEA Topic	SEA Objective	Assessment Criteria to establish if the closure of the HWRC at Congleton will:	Report Chapter No
	To minimise the requirement for energy use and increase the use of energy from renewable sources.	<ul style="list-style-type: none"> - encourage the efficient use of energy? - result in energy efficient development? - result in the high-quality design and layout of development? - promote and encourage the use of renewable energy? - incorporate renewable energy technologies? 	Outside the scope of this report
	To secure the sustainable management of waste, minimise its production, and increase re-use, recycling and recovery rates.	<ul style="list-style-type: none"> - impact on recycling rates? 	8 (Future Demand & Recycling)
	To minimise the transport effects of waste management activity.	<ul style="list-style-type: none"> - maintain or enhance necessary transport infrastructure? 	3 (Transport)
Cultural Heritage	To minimise the effects of waste management on places, features and buildings of historic, cultural and archaeological importance.	<ul style="list-style-type: none"> - protect or enhance the area's internationally, nationally, or locally designated heritage and assess their setting? 	Outside the scope of this report
Landscape	To protect the quality, integrity and distinctiveness of the landscape and townscapes from waste management activity, including historic landscapes of cultural significance.	<ul style="list-style-type: none"> - protect or enhance the landscape? Will it protect or enhance the townscape? - protect or enhance the existing built and natural environment, ensuring that the area remains distinctive? 	Outside the scope of this report
Employment	To provide employment opportunities and promote economic wellbeing through waste management activities.	<ul style="list-style-type: none"> - increase access to jobs and employment opportunities? 	7 (Socio Economic)

SEA Topic	SEA Objective	Assessment Criteria to establish if the closure of the HWRC at Congleton will:	Report Chapter No
Deliverability	To provide reliability, deliverability and operational flexibility in waste management solutions.	<ul style="list-style-type: none"> - positively contribute to the maintenance of reliable waste management solutions - positively contribute to the delivery of waste management solutions - positively contribute to the maintenance of the operational flexibility of waste management solutions? 	Outside the scope of this report
Social Inclusion	To enhance opportunities for public involvement, education and engagement in waste management.	- increase access to education and training opportunities?	Outside the scope of this report
	To promote social inclusion in waste management activities.	- impact on vulnerable or older age groups?	7 (Socio Economic)

2.6.2 Combined Effects

Whilst individual environmental impacts have been considered in individual chapters of this report, there is the potential for environmental subject areas to impact upon others. The potential combined effects are addressed in each of the respective chapters within this report, where relevant.

2.6.3 Cumulative Effects

Cumulative effects are those that may interact in an additive or subtractive manner with potential impacts of HWRC's within the network. Such cumulative effects have been addressed in each of the respective chapters within this report, where relevant.

2.6.4 Mitigation of Effects

Where appropriate, potential mitigation measures are suggested to limit or to offset any potential adverse impacts of the closure of the HWRC at Congleton.

2.6.5 Residual Effects

Residual effects are any effects which are likely to remain after mitigation measures have been applied.

2.6.6 Appraisal Scoring System

The appraisal scoring system used in the SEA has been utilised to determine the level of significance that the closure of the Congleton site may have on the identified sustainability objectives. The appraisal scoring system is provided in Table 2 (slight amendments have been made to the definition of the scoring system to provide effective application within this assessment).

Table 2: Appraisal Scoring System

Rating	Meaning	Explanation
++	Moderate beneficial effect	The closure will have a significant positive effect on the achievement of the objective
+	Minor beneficial effect	The closure will have a positive effect on the achievement of the objective.
0	Neutral effect	The closure will have no impact on the achievement of the objective.
-	Minor adverse effect	The closure will have a negative impact on the achievement of the objective.
--	Moderate adverse effect	The closure will have a significant negative impact on the achievement of the objective.
?	Unknown / dependent upon implementation	The impact of the closure on the achievement of the objective is unknown.

2.7 Topics that are outside the scope of this environmental assessment

The closure of the existing HWRC at Congleton does not involve the demolition or the movement of existing site infrastructure to a new location.

The following topics have, therefore, been 'scoped out' of this Environmental Appraisal.

- **Biodiversity, Flora and Fauna:** The proposal does not involve demolition or construction work which could have the potential to impact on ecological assets.
- **Noise, Vibration, Dust:** The proposal does not involve demolition or construction work, however, the removal of skip loading/unloading at the site may have a moderate beneficial impact on the local environment.
- **Odour:** The site does not process odorous materials and as such its closure will not have an impact on odour.
- **Soil:** The proposal does not involve demolition or construction work.
- **Water:** The proposal does not involve demolition or construction work.
- **Energy:** The proposal does not involve renewable energy or an energy intensive use.
- **Cultural Heritage:** The proposal does not involve demolition or construction work.
- **Landscape:** The proposal does not involve demolition or construction work; however, the removal of the site may have a moderate beneficial impact on the visual amenity of the area.
- **Deliverability:** This has been assessed as part of other studies commissioned by CEC.
- **Education:** A HWRC can have a beneficial impact on the education of members of the public regarding recycling and waste. The closure of one such facility will not have an impact on the wider education role which HWRC's provide.

2.8 Limitations

Technical difficulties encountered and limitations of the study include:

- Traffic survey data are based on a postcode search and does not allow for user preferences.
- Travel times do not account for congestion.
- Traffic data is based on a worst-case scenario and does not allow for residents' behavioural changes resulting from the closure.
- The assessment of air quality and carbon production does not account for congestion.
- Business users are not considered as part of this assessment.
- This assessment does not include an assessment of effects on the Waste Strategy and associated SEA.

3 Transport

3.1 Introduction

This chapter assesses the potential impact of the closure of Congleton HWRC on traffic and transportation.

3.2 Aims and Objectives

Its aims and objectives are to determine the impact of the closure on distance and travel times.

3.3 Methodology

This assessment has been based on data generated from distances of residential postcodes to their nearest HWRC's.

The assessment of significance has been derived from The Waste and Resources Action Partnership (WRAP) published HWRC Guide (2012). The guidance recommended that the distribution of HWRCs should enable driving times to be up to 20 mins for the great majority of households in good traffic conditions. Travel times might be up to about 30 minutes in very rural areas.

3.4 Baseline assessment

As indicated within the limitations section of this report, limited real time traffic data is available. The data below is based on a postcode survey which distributes potential usage according to proximity to the nearest HWRC in travel time.

The number of households which potentially utilise each of the HWRC sites at the current time within the CEC area are shown in Table 3 below.

Table 3: Household usage per site

Site	Current Number of households and % (approx.)
Alsager	21,756
	12%
Bollington	17,944
	9%
Congleton	17,761
	9%
Crewe	59,678
	32%
Knutsford	21,609
	11%
Macclesfield	23,692
	13%
Middlewich	14,349
	8%
Poynton	12,300
	7%

The current distances travelled by users of HWRCs in the Council area are shown in Table 4 below:

Table 4: Distance travelled (proportion of households)

	Less than 2 km	2 to 4 km	4 to 6 km	6 to 8 km	More than 8 km
No	28,448	59,858	29,196	26,257	45,330
%	15%	32%	15%	14%	24%

The current time taken to travel by users of HWRCs in the Council area set out in Table 5 below:

Table 5: Time travelled (proportion of households)

	Less than 5 minutes	5 to 10 minutes	10 to 15 minutes	15 to 20 minutes	More than 20 minutes
No	41,511	78,480	52,241	12,499	4,358
% (approx.)	22%	42%	28%	7%	2%

In addition to the public usage at the Congleton site, it also receives 13 service vehicles per week which averages at approximately 2 per day.

The data indicates that the local road network often becomes congested during peak times around the site in late morning and early afternoon.

3.5 Timeframe

The closure of the Congleton HWRC is to be permanent and the effects, therefore, will extend over the long-term.

The effects will be of both a direct and indirect nature, affecting both the existing site area and alternate HWRC sites.

3.6 Assessment of effect

The environmental impact of the Congleton closure is likely to re-distributed trips to either to Alsager or Macclesfield as these are the closest. Whilst it is likely that the number of overall trips will reduce because of the closure, with residents making fewer trips with a larger quantity of material, this assessment is based on the worst-case scenario of a complete re-distribution of trips on the network.

The assumed redistribution of trips based on travel time is shown in Table 6:

Table 6: Assumed trip redistribution (per no of households)

Site	Current	After Site Closure
Alsager	21,756	24,173
	12%	13%
Bollington	17,944	17,939
	9%	9%
Congleton	17,761	
	9%	
Crewe	59,678	59,678
	32%	32%
Knutsford	21,609	21,609
	11%	11%
Macclesfield	23,692	38,698
	13%	20%
Middlewich	14,349	14,693
	8%	8%
Poynton	12,300	12,300
	7%	7%

The impact on both distance and time travelled on users of the wider HWRC network with the closure of the Congleton HWRC is provided in Tables 7 and 8 below.

Table 7: Impact of closure on distance travelled (proportion of households)

	Less than 2 km	2 to 4 km	4 to 6 km	6 to 8 km	More than 8 km
No	22,262	51,240	28,452	25,915	61,220
%	12%	27%	15%	14%	32%

Table 8: Impact of closure on time travelled (proportion of households)

	Less than 5 minutes	5 to 10 minutes	10 to 15 minutes	15 to 20 minutes	More than 20 minutes
No	33,958	70,827	62,754	17,171	4,379
% (approx.)	18%	37%	33%	9%	2%

The data indicates that there is a fall in the number of people travelling in all categories under 8km, with a 35% increase in the number of households required to travel more than 8km when the Congleton HWRC closes. This equates to a **moderate adverse impact** on residents in distance travelled.

However, when assessed against time travelled, the data show that:

- There is an 18% fall in the number of people who might travel for less than 5 minutes.
- There is a 10% fall in the number of people who might travel between 5 to 10 minutes.
- There is an increase of 20% in the number of people who might travel between 10 to 15 minutes.
- There is an increase of 37% in the number of people who might travel between 15 to 20 minutes.
- There is no change to those households who might travel over 20 minutes.

This analysis therefore suggests that because of the closure of Congleton most people will travel between 5 and 10 minutes longer to reach a HWRC, with no increase in the numbers of residents who might travel over 20 minutes to reach a facility.

In accordance with the WRAP HWRC Guidance published in 2012, this equates to a **neutral impact** on time travelled to a HWRC within the Council area. However, it is recognised that the additional time would be considered to have a **minor adverse impact** on users of the services.

The closure of the HWRC at Congleton should have a **moderate beneficial impact** on road congestion and the number of HGV/Roll on Roll off (RORO) vehicles operating in the local area.

3.7 Assessment of combined and cumulative effects

The cumulative effects of the proposal include the wider impacts on the alternate HWRCs in particular Alsager and Macclesfield. Without mitigation measures, the closure could increase the potential for congestion at these sites having a **moderate adverse effect**.

Although the assessment has assumed that an equal amount of waste that is disposed currently at the Congleton site will be transferred to the facilities at Alsager and Macclesfield, it is considered that the number of service vehicles travelling may not increase relatively due to the potential to achieve economies of scale at Alsager and Macclesfield. It is concluded, therefore, that the cumulative effects of service vehicles at the alternative sites could have a **minor beneficial impact** through the reduction of these vehicles on the local road network.

The combined effects of traffic on air quality are considered in chapter 4 of this report.

3.8 Mitigation measures

Future improvements to waste management infrastructure and continued improvements in reuse has the potential to reduce the need to travel to HWRCs.

In addition, the possibility of additional bring sites should be investigated in locations which are over 8km from a HWRC. These measures may reduce the total travel time and distance travelled by residents to **minor adverse** if the overall number of trips is reduced.

To mitigate potential queuing traffic and congestion at other HWRC sites, fairer access management should be investigated, this could include the extension of opening times of Alsager and Macclesfield and a number plate access option (amongst others). These measures may reduce the cumulative impact of the scheme to **neutral**.

3.9 Residual Impacts

A summary of residual effects is provided in Table 9 below:

Table 9: Summary of Residual Effects

	Nature of effect	Duration	Significance	Possible Mitigation	Residual
Travel Distance	Direct	Permanent	Moderate Adverse	Bring sites	Minor Adverse
Travel Time	Direct	Permanent	Minor Adverse	Bring sites	Minor Adverse
Congestion	Indirect	Permanent	Moderate Beneficial	n/a	Moderate Beneficial
Service Vehicles	Direct	Permanent	Minor Beneficial	n/a	Minor Beneficial
Cumulative Impact	Indirect	Permanent	Moderate Adverse	Fairer access management systems	Neutral
Overall	Direct	Permanent	Moderate Adverse	As above	Minor Adverse

4 Air Quality

4.1 Introduction

This chapter assesses the potential impact of the closure of Congleton HWRC on local air quality and pollution.

4.2 Aims and Objectives

The aim of this assessment is to review the impact of the closure on local air quality and air pollution through the consideration of traffic routing and the associated impacts on Air Quality Management Areas (AQMA).

4.3 Methodology

CEC have published a list which represents a non-exhaustive indication of when an Air Quality Impact Assessment may be required.

1. Any development within an AQMA, or within 500m of existing Air Quality Management Areas
2. food retail development >0.2HA (1000m₂ gross floor space)
3. office development >0.8Ha (2500m₂ gross floor space)
4. housing development >1.0 Ha or >80 units
5. development likely to lead to an increase of >60 vehicle movements per hour
6. development likely to result in increased traffic, congestion, or changes to vehicle speeds (new junctions, roundabouts etc)
7. development likely to significantly change the traffic composition
8. development significantly increasing car parking provision (>300 spaces or 25% increase)
9. development in close proximity (<100m) to busy roads / junctions
10. development likely to result in a significant change in air quality, or development of residential properties in an area of already poor air quality
11. poultry establishments > 400,000 birds (mechanical ventilation) or 200,000 (natural ventilation) or > 100,00 (Turkeys) and with relevant exposure within 100m of the unit; and,
12. biomass / CHP / Industrial Installation (see guidance under the biomass and clean air act pages).

In accordance with points 1 and 7 above, this assessment considers the re-routing of traffic caused by the closure and investigates how these routes impact on local AQMAs.

4.4 Baseline assessment

The Cheshire East Council Annual Status Report 2020 (June 2020) provides details of all the air quality management areas (AQMAs) within its administrative area. The three locations of interest are considered below.

- **Congleton:** There are 3 AQMAs with the potential to be affected by existing and future traffic movements associated with the Congleton HWRC.
- **Alsager:** There are no AQMAs located in Alsager.
- **Macclesfield:** There are no AQMAs located between Congleton and the Macclesfield Household Waste Recycling Centre.

The locations of the Congleton AQMAs are presented in Figure 2 below.

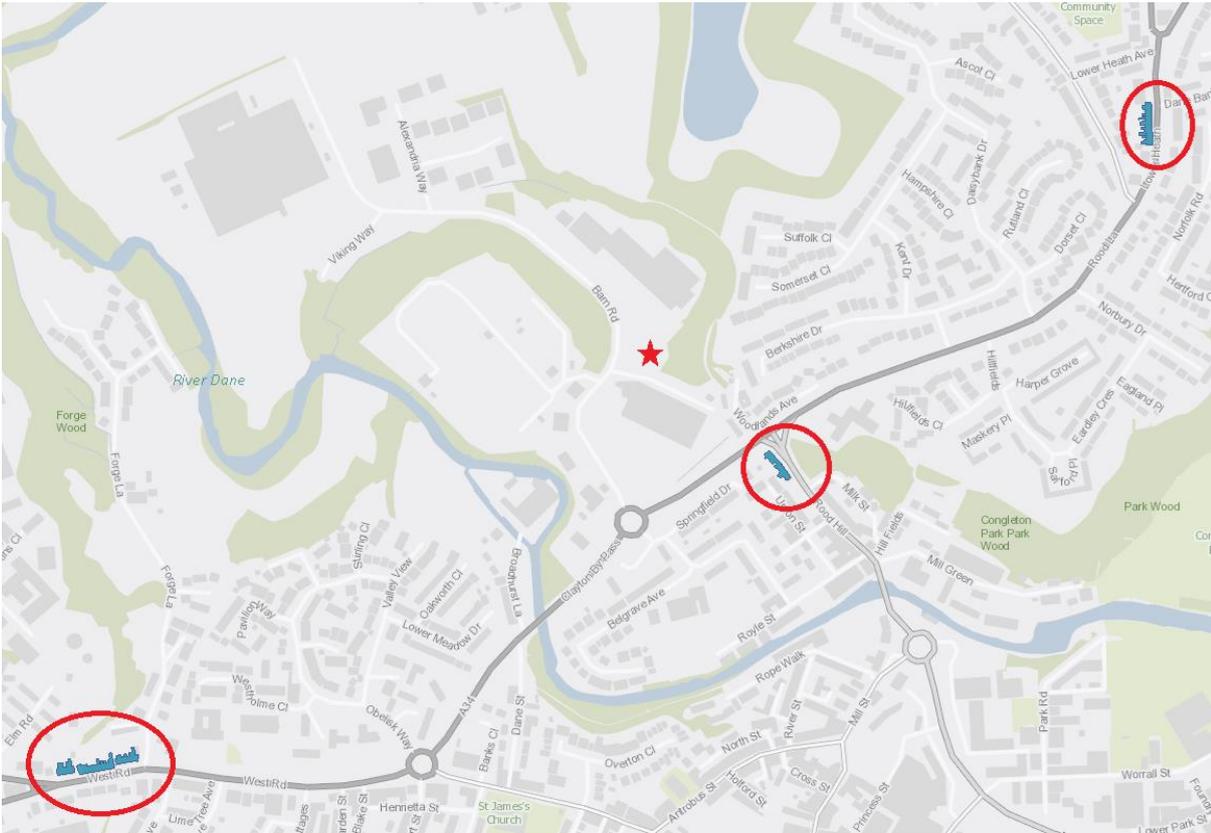


Figure 2: Congleton AQMA

The plan shows that the existing Congleton HWRC is not located within any of the AQMA's however traffic using the facility which travel along the A34 / A54 does have the potential to travel through them.

Cheshire East Council monitors levels of Nitrogen dioxide (NO₂) within its administrative area, including within the 3 Congleton AQMAs. The Council ASR 2020 shows the following monitoring locations within the Lower Heath AQMA.



Figure 3: Lower Heath AQMA monitoring locations.

The 2019 monitoring results for these locations are as follows:

- CE115 1 Lower Heath: 22.33 $\mu\text{g}/\text{m}^3$
- CE114 28 Lower Heath: 47.44 $\mu\text{g}/\text{m}^3$
- CE110 Lights outside 99 Lower Heath: 28.05 $\mu\text{g}/\text{m}^3$.

Of these monitoring locations, only the CE114 28 Lower Heath result is above the annual average limit of 40.0 $\mu\text{g}/\text{m}^3$.

The Council ASR 2020 shows the following monitoring locations within the Rood Hill AQMA:



Figure 4: Rood Hill AQMA monitoring locations

The 2019 monitoring results for these locations are as follows:

- CE116 68 Rood Hill: 33.42 $\mu\text{g}/\text{m}^3$
- CE117 Rood Hill takeaway 62/64: 35.92 $\mu\text{g}/\text{m}^3$.

Of these monitoring locations, neither result is above the annual average limit if 40.0 $\mu\text{g}/\text{m}^3$.

The Council ASR 2020 shows the following monitoring locations within the West Road AQMA:

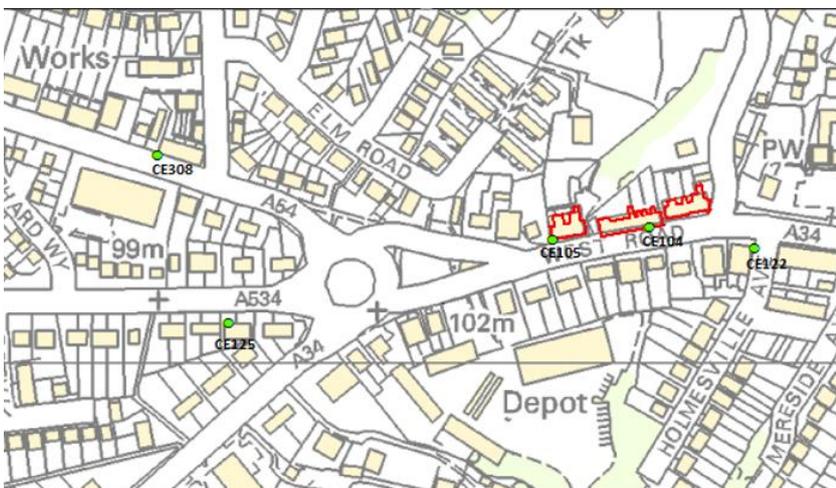


Figure 5: West Road AQMA Monitoring locations

The 2019 monitoring results for these locations are as follows:

- CE105 35 West Road: 25.31 $\mu\text{g}/\text{m}^3$
- CE104 13 West Road: 43.59 $\mu\text{g}/\text{m}^3$.

Of these monitoring locations, only the CE104 13 West Road result is above the annual average limit of 40.0 $\mu\text{g}/\text{m}^3$.

4.5 Timeframe

The closure of the Congleton HWRC is to be permanent and the effects, therefore, will extend over the long-term.

The impacts associated with air quality are considered to be indirect as they relate to emissions generated by users and not activities on the site itself.

4.6 Assessment of effect

As stated earlier within this chapter, the impact of the closure of the Congleton HWRC on air quality is linked to traffic and their associated flows.

The Congleton HWRC serves approximately 17,761 households. Traffic flow data shows that the Annual Average Daily traffic (AADT) for the 3 HWRCs is currently as follows:

- Alsager: 289
- Congleton: 243; and
- Macclesfield: 406.

As would be expected the peak flows coincide with weekends when users have the time to visit the HWRC. Closing the Congleton HWRC would therefore immediately remove 243 AADT trips from the network in the immediate vicinity of the HWRC.

Detailed trip routing is currently not available however it is considered that the most likely options for the resulting displacement are:

1. A proportion of traffic from West Heath which currently travels to the Congleton HWRC would continue to pass through the West Road AQMA and would now pass-through Congleton through the Lower Heath AQMA.
2. A proportion of traffic from West Heath which currently travels to the Congleton HWRC would now use the Alsager HWRC. All existing flows would cease to pass through the West Road AQMA.
3. Traffic accessing the Congleton HWRC from the A54 Rood Hill (from Congleton Centre) would continue to do this, however traffic would then pass through either the West Road AQMA if visiting the Alsager HWRC or Lower Heath AQMA if visiting the Macclesfield AQMA.
4. Traffic from Eaton would use the Macclesfield HWRC and would not pass through the Lower Heath AQMA.
5. Traffic from Lower Heath would use the Macclesfield HWRC and would not pass through the Lower Heath AQMA.

The total AADT using the Congleton HWRC is 243 and it is assumed that all of these trips would be distributed across the network (as the worst-case scenario), particularly the A34 and A54 to the south, north and east of the HWRC. This assessment has therefore assumed that the number of vehicles on the network would not materially change, however there is likely to be a redistribution.

For the users who are to the south and north of Congleton, the diversion to the Alsager and Macclesfield HWRCs respectively may result in a **minor beneficial impact** (i.e. reduction in traffic through the 2 AQMAs at Lower Heath and West Road respectively). For the users in Congleton, there is expected to be no change in numbers through the Rood Hill AQMA, however these would now travel north or south on the A34 through the Lower Heath and West Road AQMAs. As such this may result in a **minor adverse impact**.

In overall terms, based on the information available, it is considered unlikely that there will be any material difference in the concentration of traffic pollution (nitrogen dioxide) in the AQMAs as a result of this traffic redistribution. It is therefore concluded that the closure would have a **neutral effect** on local air quality.

As a result of the closure of the HWRC, 2 HGV collections per day would no longer be required. Whilst in theory these movements will take place elsewhere, as material is diverted by residents to other sites, it is considered that economies of scale would be achieved through bulking up of material into larger vehicles for collection from these sites, and as such there would be a **minor beneficial impact** associated with the closure of the facility.

4.7 Assessment of combined and cumulative effects

There should be no cumulative effect because the closure of a site will not generate additional vehicle movements on the local road network.

4.8 Mitigation measures

The proposed development will not result in any adverse impact on local air quality and as such no mitigation measures are proposed.

4.9 Residual Impacts

A summary of residual effects is provided in table 10 below.

Table 10: Summary of Residual Effects

	Nature of effect	Duration	Significance	Possible Mitigation	Residual
Impact on AQMA	Indirect	Permanent	Neutral	N/A	Neutral to minor beneficial

5 Climate Change

5.1 Introduction

The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change. They provide regular assessments of the scientific basis of climate change, its impact and future risks, and options for adaptation and mitigation.

The IPCC has published five comprehensive assessment reports reviewing the latest climate science, along with several special reports on specific topics. The Fifth Assessment Report (AR5) is the latest key report, finalised in 2014. These reports recognise that reduction in carbon emissions is key to reducing climate change.

This chapter assesses the closure of the facility on carbon emissions and as such its impact on climate change.

5.2 Aims and Objectives

The scope of the assessment is primarily focused on carbon dioxide (CO₂) emissions associated with transport, specifically the consideration of increases (or decreases) in distances that local residents are required to travel in order to access their closest HWRC, and the resultant changes in carbon dioxide emissions.

Changes in frequencies/patterns of waste collection vehicles removing material from the HWRC is also briefly considered.

The effect that the closure of the HWRC will have on recycling rates and/or the volume of material collected by the system, and the carbon implications of those effects, is not considered. It is assumed that the waste will be diverted to other facilities in similar volumes and that onward processing continues with the same technologies or methods.

5.3 Methodology

For the purposes of this assessment, traffic data and analysis has been utilised. The information includes postcodes for all residents for whom the Congleton facility is their closest HWRC. Distances from these postcodes to the HWRC is provided in km.

The assessment has assumed a complete re-distribution of trips across the network as a worst case, in reality (prior to any mitigation measures being employed) the number of trips is likely to reduce with residents making fewer trips but with larger quantities of materials.

From this information, the additional distance each resident would theoretically be required to travel to access their closest HWRC can be calculated. Based on the average number of daily and weekly visits by local residents to the HWRC an estimate can be made as to the additional distance in km that residents will be required to travel as a result of the closure.

This assessment has utilised available figures for the average carbon emissions per km from road vehicles registered in the UK. The carbon intensity per km of road vehicles has been falling significantly over the last 20 years and the most recent data (second quarter of 2015 - April to June) puts the average carbon dioxide

emissions of cars at 122.1 grams of carbon dioxide per kilometre. Given the number of electric vehicles now on the road in the UK, alongside numerous older, more carbon intensive vehicles, the figure above is considered reasonably accurate for the purposes of this assessment.

Figures are also available for a range of heavy goods vehicles. For the purposes of this assessment, waste collection vehicles have been assumed to comprise 14-20 tonne rigid HGVs at Euro VI standard. The average carbon dioxide emissions of these vehicles is 540gCO₂/km.

Based on the parameters above, estimates are made of the annual CO₂ changes as a result of the closure of the HWRC.

There is no established threshold for assessing the significance of individual project's contributions to climate change. However, IEMA guidance on considering Greenhouse Gas (GHG) Emissions within EIAs states that '*...it might be considered that all GHG emissions are significant and an EIA should ensure the project addresses their occurrence by taking mitigation action...*'.

Appendix C of the above guidance states that '*When evaluating significance, all new GHG emissions contribute to a significant negative environmental effect; however, some projects will replace existing development that have higher GHG profiles. The significance of a project's emissions should therefore be based on its net impact, which may be positive or negative. Where GHG emissions cannot be avoided, the EIA should aim to reduce the residual significance of a project's emissions at all stages. Where GHG emissions remain significant but cannot be further reduced... approaches to compensate the project's remaining emissions should be considered.*'

5.4 Baseline assessment

Based on the six-week reporting period there was an average of 243 visits to Congleton HWRC per day. Whilst it was generally higher at the weekend and on specific weekdays, this figure is considered the most suitable to consider annual carbon emissions contributions. Based on the facility being open for 365 days a year, this equates to 88,695 visits.

The average distance that local residents (for whom the Congleton site is their closest HWRC) are required to travel is 3.2 km. This would mean a 6.4km round trip on average for each visit. Based on the annual number of visits above, this equates to 567,848km travelled per annum by local residents to and from the HWRC.

Assuming that residents are travelling in the average modern passenger car, 122.1gCO₂ would be emitted for every km driven, equating to an annual contribution of 69,309,820g CO₂, or 69.3 tonnes a year.

5.5 Timescales

The closure of the Congleton HWRC is to be indirect and permanent extending over the long-term.

5.6 Assessment of effect

The most significant potential for effects on climate change from the closure of Congleton HWRC are from changing journey distances, as local residents are required to travel further to an alternative HWRC. The average distance for local residents to their next closest HWRC is 10.9km, which equates to an average increase in journey distance of 7.7km for each resident.

Based on the annual total trips of 88,695 and an average round trip of 15.4km, this equates to an additional 1,365,903 km driven per annum by local residents. Using the figure above of 122.1gCO₂/km this equates to approximately 166.7 tonnes CO₂ per annum.

As a result of the closure of the HWRC, 2 HGV collections per day would no longer be required. Whilst in theory these movements will take place elsewhere, as material is diverted by residents to other sites, it is considered that economies of scale would be achieved through bulking up of material into larger vehicles for collection from these sites, and as such there would be some CO₂ savings. Based on an assumed round trip for waste collection vehicles of 20km this saving equates to 7.88 tonnes (540g CO₂/km x (365 x 2 x 20)).

This gives a net CO₂ increase of 158.8 tonnes per annum.

Overall, the development will have a **moderate adverse effect** as it will result in higher carbon emissions associated with transport emissions than if the HWRC remained open.

5.7 Assessment of combined and cumulative effects

Climate Change is a global concern and as such the cumulative effects of the scheme have been considered as part of the assessment above.

5.8 Mitigation measures

Further consideration into improvements to existing waste management sites and possibilities of introducing bring sites in areas which are in locations of 8km or more is further assessed in chapter 8 of this report. This may reduce the number of trips that residents require to take and will therefore reduce the trip rates and with it, carbon emissions.

This will reduce the impact on climate change to **minor adverse**.

5.9 Residual Impacts

A summary of residual effects is provided in Table 11 below.

Table 11: Summary of Residual Effects

	Nature of effect	Duration	Significance	Possible Mitigation	Residual
Climate Change	Indirect	Permanent	Moderate Adverse	Provision of bring sites. Infrastructure Improvements.	Minor Adverse

6 Amenity

6.1 Introduction

This chapter considers the potential for the closure of the facility to cause environmental nuisance.

6.2 Aims and Objectives

This assessment will review the impacts of the closure on noise, fly tipping and litter.

6.3 Methodology

There is no specific methodology set down to determine the amenity value of a HWRC. This chapter identifies the potential impacts of the closure of the HWRC on the local communities at and around the existing site and determines the significance of any impact on local receptors.

6.4 Baseline assessment

Due to effective on-site management, the area is not subject to a high or significant proportion of fly tipping, littering and vermin.

The material deposited at the site is not odorous and the area has not been subject to complaints about unpleasant smells and noxious odours.

The operation of the site causes noise at times, which is associated with depositing material into the skips and vehicles entering and moving around the site. Noise is also generated from the service vehicles and the associated changeover of RORO (roll on – roll off) containers.

6.5 Timescales

It is anticipated that there could be some short-term, temporary effects following the closure of Congleton's HWRC if members of the public are not prepared to drive to the alternative facilities at Alsager and Macclesfield.

Over the long term, any temporary effects will be mitigated by custom and practice of using the alternative sites and there should be no permanent effects subject to any proposed re-use of use of the site by the leaseholder and approval by CEC.

6.6 Assessment of effect

The removal of the site will remove the existing noise source which will result in a **minor beneficial effect** on the local area.

There is no evidence to suggest that the closure of a household waste recycling centre leads to an increase in litter and fly-tipping. A **minor adverse effect** has been assumed in the short term if members of the public drive to Congleton find the site closed, fly tipping instead of travelling to an alternate site.

6.7 Assessment of combined and cumulative effects

The impacts associated with litter and fly tipping are associated with the immediate area and as such wider impacts on the remaining HWRC network is not considered likely.

The redistribution of traffic will have a combined impact on amenity. The impacts of the closure of traffic are considered in chapters 3 and 4 of this report.

6.8 Mitigation measures

It is recommended that signage of the closure, location of alternative facility and information on penalties for unlawful entry onto the site is erected at the site gates.

It would be prudent to install CCTV at the site entrance to deter potential fly tippers in the short term. These measures will reduce the impact to **neutral**.

6.9 Residual Impacts

A summary of residual effects is provided in Table 12 below.

Table 12: Summary of Residual Effects

	Nature of effect	Duration	Significance	Possible Mitigation	Residual
Noise	Direct	Permanent	Minor Beneficial	N/A	Minor Beneficial
Fly tipping and litter	Indirect	Temporary	Minor Adverse	Signage & CCTV	Neutral
Overall	Both	Both	Neutral	As above	Neutral

7 Socio Economic

7.1 Introduction

This chapter assesses the potential impact of the closure of the Congleton HWRC on socio-economic factors.

7.2 Aims and Objectives

This assessment will review the impacts of the closure of the HWRC on local employment opportunities and on vulnerable or older age groups who have made use of the existing site.

7.3 Methodology

There is currently no formal guidance or regulation setting out the preferred method or content for an assessment of potential economic and social impacts. This chapter identifies the potential impacts on socio-economic factors and determines the significance of this impact on local receptors.

7.4 Baseline assessment

The existing site currently consists of 6 central skips with a number of smaller collection units. The site employs 4 members of staff at any one time. Staff work in shifts, 2x5 day shifts, 1x3 day shift and 1x1 day shift.

In addition, the site employs one service vehicle driver, who is part of a wider fleet that service the wider HWRC network.

7.5 Nature of effect

Due to the closure of the Congleton HWRC any effects are direct, long term and permanent.

7.6 Assessment of effect

The closure of the Congleton HWRC will not impact on employees associated with the service vehicles (or wider management) as they will still be required to service the remaining HWRC network.

However, the site closure will necessitate the loss of 4 jobs which is considered to give rise to a **moderate adverse impact**.

The existing site is not considered to be user friendly for residents who are vulnerable or elderly, requiring a member of the public to transfer materials into their car, drive, unload and return home. Owing to the constraints of the site, it was not feasible to improve the working arrangements at the site significantly within the operational service life of the facility.

As identified in Chapter 3, the impacts of the proposal will result in an additional drive time of approximately 5 to 10 minutes from many locations. This is considered not to introduce an impediment to users of the site who already drive and load/unload their vehicles. The closure is therefore considered to have a **neutral** impact on these users of the HWRC.

7.7 Assessment of combined and cumulative effects

Cumulative or combined effects on the wider HWRC network are considered unlikely.

7.8 Mitigation measures

Opportunities for redeployment of staff members should be identified, possible extension to opening hours at Alsager and Macclesfield (as recommended in Chapter 3) and a possible re-use shop at Macclesfield may provide opportunities. Should redeployment be achieved, this will lead to a **minor adverse to neutral impact** on jobs and the local economy.

Further consideration into the possibilities of future infrastructure improvements and for bring sites in areas which are in locations of 8km or more from a HWRC site are further assessed in chapter 8 of this report. This may reduce the need to utilise the HWRC sites for vulnerable and older age groups leading to a **minor beneficial impact** for these groups of residents.

7.9 Residual Impacts

A summary of residual effects is provided in Table 13 below:

Table 13: Summary of Residual Effects

	Nature of effect	Duration	Significance	Possible Mitigation	Residual
Employment	Direct	Permanent	Moderate Adverse	Redeployment.	Minor Adverse to Neutral
Vulnerable and elderly groups	Direct	Permanent	Neutral	Bring sites. Infrastructure improvements.	Minor Beneficial
Overall	Direct	Permanent	Minor Adverse	As above	Neutral

8 Future Demand & Recycling

8.1 Introduction

This chapter assesses the potential impact of the closure of the Congleton HWRC on recycling and future demand for HWRC sites generated by new developments in the area.

8.2 Aims and Objectives

The assessment of future demand and the impact on the Waste Management Strategy is subject to assessment as part of CEC assessment of the wider HWRC provision. This is outside the remit of this report.

This chapter focuses on the prime concerns expressed by members of the public as part of the consultation procedure undertaken by CEC in the last quarter of 2020. Those were that:

1. The closure would increase the risk of the misuse of kerbside collections.
2. The closure would have an adverse impact on recycling rates.
3. The impact of future housing/commercial growth ought to be investigated.

8.3 Methodology

There is currently no formal guidance or regulation setting out the preferred method or content for an assessment of this nature. This chapter reviews the amount and type of waste received at the Congleton site, identifies where this waste is likely to be redirected and qualitatively assesses the impact of this and any projected future growth.

8.4 Baseline assessment

The latest data (2019 to 2020) on tonnages received and managed by the Congleton HWRC is provided in the Table 14 below:

Table 14: Tonnages received at Congleton HWRC in 2019 to 2020

Waste Type	Tonnages	Percentage
Disposal (tonnes):		
Civic Amenity Waste to Energy	658.19	23.61
Civic Amenity Waste to Landfill	238.69	8.56
Green Waste (tonnes):		
Green Waste for composting	438.70	15.74%
Inert (tonnes):		
Hardcore	99.84	3.58%
Recyclables (tonnes):		
Batteries - Automotive	6.07	0.22%
Batteries - Domestic	1.52	0.05%
Hard Plastic	-	
Card	123.72	4.44%

Waste Type	Tonnages	Percentage
Chipboard or Mixed Wood/Chipboard	287.15	10.30%
Ferrous Metal	153.93	5.52%
Non-Ferrous Metal	93.96	3.37%
Glass	17.33	0.62%
Cooking Oil	0.62	0.02%
Engine Oil	5.22	0.19%
Paper	47.34	1.70%
Plastic Bottles	2.13	0.08%
Wood	246.07	8.83%
Textiles	63.40	2.27%
Waste Paint / Chemicals - Recycled	0.99	0.04%
Fridges & Freezers	32.74	1.17%
Small WEEE (SDA)	92.86	3.33%
Large WEEE (LDA)	32.68	1.17%
TVs/CRTs	28.98	1.04%
Tubes	0.27	0.01%
Reuse (tonnes):		
Bric-a-Brac (Re-use)	115.16	4.13%
Total	2787.57	100%

The waste types which made up the majority of waste at the HWRC during 2019 to 2020 included:

- 32.17% of waste taken to the Congleton HWRC is taken for final disposal (or energy recovery).
- 15.74% of waste is green waste for composting.
- 10.30% of waste is made up of Chipboard or mixed wood/chipboard.
- 8.83% is made up of wood.

8.5 Timescales

Due to the closure of the Congleton HWRC any effects will be direct, long term and permanent.

8.6 Assessment of effect

As identified in section 8.4, the largest proportion of materials taken to the HWRC at Congleton includes residual waste, wood waste and garden waste. Due to the bulky nature of these materials, and the provision of green waste doorstep services by CEC during summer months, the closure of the Congleton HWRC is unlikely to result in these materials being disposed of as part of the residual 'black bag' waste by the residents in significant quantities.

With regards to smaller items such as metals, glass, textiles, it is possible that these may be disposed of within black bags/bins for collection. However, these materials can be disposed of locally within existing bring sites which includes glass and textiles.

With regards to electrical items and bric-a-brac, charity shops and the proposed re-use centre at Macclesfield will provide a more sustainable solution to managing this type of waste and increase re-use in line with the waste hierarchy. This will offer an improvement on the current services.

It can therefore be concluded that the closure of the facility may result in a **minor adverse effect** at worst on recycling rates should residents add one or two items to the residual waste bin from time to time.

For new developments, the Cheshire East Local Plan Strategy adopted in 2017 and the validation checklist (for housing over 50 units) requires that all developments must consider sustainable waste management methods (such as internal and external storage) as an integral feature in design. Consideration of the impact of the waste generated from the proposals should be considered at the planning stage and planned for as part of CEC's wider waste management strategy.

As referred to previously, the Waste and Resources Action Partnership (WRAP) published HWRC Guide (2012) recommended that distribution of centres should enable driving times to HWRCs to be up to 20 minutes for the great majority of households in good traffic conditions and 30 minutes in very rural areas). As identified in Chapter 3, the remaining HWRC centres provide this coverage which allows the waste authority to ensure that all new developments are serviced in accordance with guidelines.

It is concluded, therefore, that the proposed closure would have a **neutral impact** on future demand.

8.7 Assessment of combined and cumulative effects

The closure of the HWRC is likely to result in greater tonnages of waste being transported to Alsager and Macclesfield, which could result in an in-direct impact on recycling rates at these sites should they already be at (or close to) maximum.

This could also give rise to increased levels of congestion at the alternative sites if they become congested due to the additional users.

The combined and cumulative effects of the closure on recycling rates and congestion at alternative sites is therefore considered to be **moderate adverse**.

8.8 Mitigation measures

To enable residents to easily access recycling for some waste types, it is recommended that CEC investigates options to provide bring sites in the area which are outside a 15-minute travel time.

A geographical illustration which identifies the required area is provided within the figure 6 below.

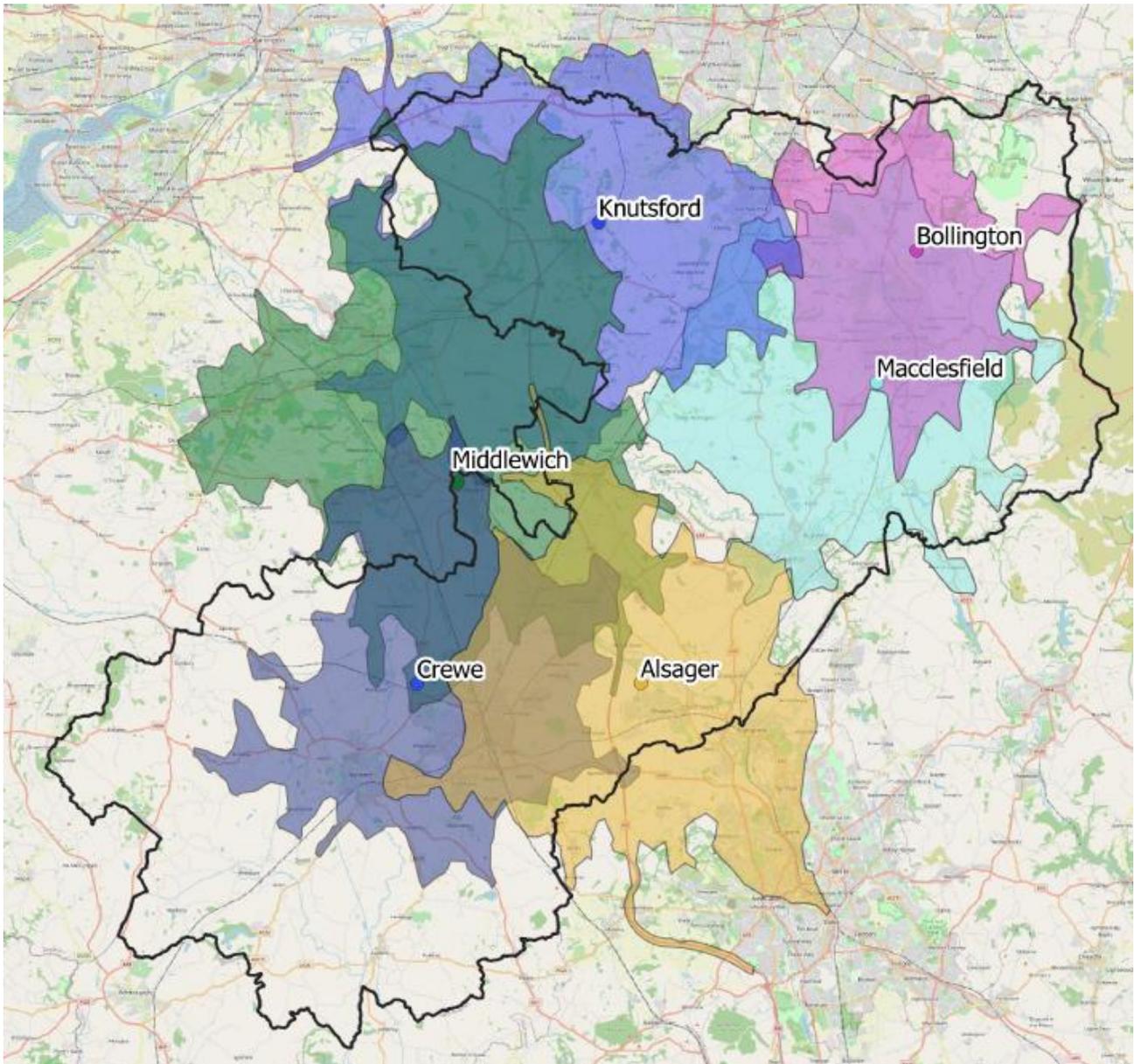


Figure 6: 15 Minute Travel Time.

This boundary covers an area to the West of Congleton, which runs between the River Dane and the A54. This area encompasses the villages of Somerford, Brereton Heath, Davenport, Sandlow and Swettenham to Twemlow Green.

An investigation of potential sites/options for 'bring' facilities within these locations such as supermarket or council car parks should be undertaken.

Although it is not possible to provide bring bank facilities for wood or green waste, the following items are possible:

- Glass
- Card
- Paper and,
- Textiles.

This may reduce the proportion of these wastes being taken to an alternate HWRC reducing some of the 9.03% of these wastes, which are currently being taken to the Congleton site. This will reduce the impact of the closure of Congleton HWRC to **neutral** and potentially to **minor beneficial** as such bring sites will encourage greater local recycling.

To insure against cumulative impacts associated with the pressure on alternate HWRC sites, the efficiency of the operations should be optimised. In addition, further investigation regarding the potential of fairer access such as extended operating hours and managed access systems could reduce congestion at these sites. With the implementation of these measures, cumulative impacts of the closure could reduce to **neutral**.

In addition to mitigating potential effects associated with recycling rates, these mitigation measures may provide a beneficial impact on:

- Traffic: The provision of bring sites will reduce the need to travel to a HWRC.
- Congestion: The provision of a managing fairer access will reduce congestion at the alternate sites.
- Journey times: The provision of longer opening hours may serve to reduce congestion.
- Vulnerable People and the Elderly: The provision of bring sites will increase accessibility for the recycling of these materials.
- Employment: The provision of longer opening hours and the need to service the 'bring' sites may provide redeployment opportunities.

8.9 Residual Impacts

A summary of residual effects is provided in Table 15 below:

Table 15: Summary of Residual Effects

	Nature of effect	Duration	Significance	Possible Mitigation	Residual
Recycling Rates	Direct	Permanent	Minor Adverse	Bring Sites & Infrastructure improvements	Minor Beneficial
Future Demand	Direct	Permanent	Neutral	n/a	Neutral
Cumulative effects on recycling provision at alternate sites	Indirect	Permanent	Moderate Adverse	Bring Sites The management of fairer access systems. Wider infrastructure improvements.	Neutral
Overall	Direct	Permanent	Minor Adverse	As above	Neutral

9 Conclusions

Table 16 below summarises the findings of the environmental appraisal in accordance with the appraisal scoring system contained within the SEA.

Table 16: Summary of Effect

SEA Objective	Assessment	Impact	Possible Mitigation	Residual Impact
Population & Human Health Material Assets	Transportation	Moderate Adverse	Bring sites. The management of fairer access systems.	Minor Adverse
Air Quality Population & Human Health	Air Quality	Neutral	N/A	Neutral to Minor Beneficial
Climate Factors	Climate Change	Moderate Adverse	Bring sites. Infrastructure Improvements.	Minor Adverse
Population & Human Health	Amenity	Neutral	Signage and CCTV	Neutral
Employment Social Inclusion	Socio Economic	Minor Adverse	Redeployment and infrastructure improvements.	Neutral
Population & Human Health Material Assets	Future Demand & Recycling	Minor Adverse	Bring sites. The management of fairer access systems. Wider infrastructure improvements.	Neutral

As indicated in Table 1 and section 2.7 of this report, the SEA objectives associated with the closure of the Congleton HWRC generally have the potential to offer the local area a benefit due to the removal of the existing site or are not applicable.

This assessment has identified that there are several areas where the proposal has a neutral to moderate adverse impact before mitigation measures are applied, these are summarised in Table 16 above.

Following implementation of the recommended mitigation measures summarised above, the residual impact of closing the Congleton HWRC ranges between **minor beneficial to minor adverse**. The adverse impact on the closure focuses on the additional distances that the waste will be transported by residents and the additional carbon that this transportation will generate.

The minor adverse impact is likely to be offset by improvements in the sustainability of the existing facilities network CEC's Waste Management Strategy. These include:

- The continued progress of residents to successfully reduce and reuse materials reducing the need to transport them to a HWRC.
- Consideration of onwards travel of the consolidated waste materials from the remaining HWRCs and the economies of scale that bulking of materials generally achieve.
- Optimisation of the existing HWRC sites to ensure they are fully utilised which will avoid increasing the carbon footprint and impacts of local amenity through the provision of a new site.
- The improvement of existing sites leading to an increase in recycling and reuse rates, which would typically have a greater carbon saving than a small additional distance travelled by residents.
- Wider carbon offsetting measures such as the utilisation of hydrogen collection vehicles and Borough level carbon offsetting.
- Financial considerations associated with the management and running of the facilities.

10 Recommendations

This report assesses the worst-case scenario associated with the generation of traffic and usage of the alternate sites after the closure of Congleton. CEC will need to monitor the effects of the closure and investigate the following recommendation measures based on need.

The following mitigation measures are recommended to limit the potential impacts of closing the Congleton HWRC.

- The provision of signage and CCTV at the Congleton site to deter fly-tipping.
- Investigation into the management of fairer access at the alternate sites such as the extension of opening hours and managed access arrangements.
- The provision of bring sites in locations which are over 8km from a HWRC.
- Investigation into the potential for further upgrades to existing infrastructure.