

ENGINE IDLING – FEASIBILITY REPORT FOR CHESHIRE EAST COUNCIL

Purpose

In March 2022, the Council's Highways and Transport Committee requested that options to help reduce instances of engine idling were reviewed, including whether additional provisions in legislation should be adopted.

A small working group comprising officers from strategic transport, parking services, air quality, licensing and public health was formed to develop an evidence-based report to understand existing air quality issues, lessons learnt from other councils who have adopted and currently enforce the legislation, and to identify options that the council could implement to tackle engine idling.

Background

Air pollution can cause short- and long-term effects on health and contribute to climate change. The need to reduce air pollution is identified as a key priority within the Council's Environment Strategy (2020 – 2024), Corporate Plan (2021 – 2025, *a council which empowers and cares about people and a thriving and sustainable place*), Air Quality Strategy (2018) and Carbon Neutral Action Plan (2020 – 2025).

Under the Environment Act 1995, the council has a duty to review and assess air quality across the borough to check concentrations against a set of health-based objectives for specific air pollutants. Air quality across most of the borough is good and seven Air Quality Management Areas (AQMA's) were revoked in 2021. However, 12 AQMA's remain across the borough that have demonstrated a breach of the annual mean concentration for nitrogen dioxide (NO₂) (40 µg/m³)¹, which are mostly associated with vehicular traffic. Interventions for each area are included within the Cheshire East Air Quality Action Plan (AQAP).

The AQAP contains an action to educate and, where possible, enforce requirements to switch off idling engines to help improve air quality. Progress is currently being made on the launch of an anti-idling campaign because unnecessary idling increases fuel use and emissions of pollutants.

Engine Idling Legislation

The Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002 allows councils to issue Fixed Penalty Notices (FPNs) against drivers who leave their engine idling and refuse to turn off their engines once asked by an Officer. The legislation applies to all vehicles on public roads, including buses, taxis, and private vehicles. It does not apply to vehicles that are:

- Stationary at traffic lights or because of congestion;
- Broken down and under test or repair;
- Need to refrigerate fresh goods or run a compactor on a refuse vehicle; or
- Any other situations deemed acceptable (e.g., defrosting a windscreen or cooling the inside of a vehicle down on a hot day for a few minutes).

Over 30 local authorities have adopted anti-idling enforcement legislation, including Cheshire West & Chester Council, in a bid to improve air quality. AirQualityNews submitted freedom of information

¹ Air Quality Management Area Maps (Cheshire East, 2022). URL: https://www.cheshireeast.gov.uk/business/environmental_health/local_air_quality/aqma_area_maps.aspx. Last accessed 26 August 2022.

requests to Reading, Camden, Westminster, Southwark, and Norwich Councils to ask how many FPNs they issued during 2018². Reading, Camden, and Norwich issued no FPNs, while Southwark Council issued nine and Westminster, 20. It has raised questions over how effective council strategies are when it comes to enforcing vehicle idling.

Baseline

To date, the council has chosen to educate drivers about the importance of switching off engines, rather than adopting legislation that could allow enforcement to be undertaken. Education has been primarily focused on known hotspots for engine idling, including schools.

Throughout the year, the council's Air Quality Awareness Group³ plan and execute various activities for national and international awareness campaigns.

Schools

2020 Engine Idling Survey

Due to direct approaches made by schools and parents, Civil Enforcement Officers (CEOs) recorded the number of idling vehicles whilst undertaking routine school patrols during a seven-week period in January and February 2020. Given the time of year, this provided a robust worst-case scenario.

49 idling cases were recorded (an average of seven cases per week). There were also a few locations where vehicle idling was recorded on more than one occasion.

2022 Engine Idling Survey

To supplement the 2020 survey, a 'snap survey' was completed by CEOs as part of routine school patrols between Wednesday 07 September and Friday 16 September 2022. Of the 18 schools that were patrolled, idling cases were only observed at eight schools (with 15 cases in total across the survey period). This is lower than 2020, which is likely to be a combination of the time of year (September is much warmer) and the promotion/ education campaigns run over the past two years. This latest data also provides an opportunity to provide more focused promotion/ education campaigns going forward.

Buses

Currently, 99% of commercial and subsidised bus services are operated by vehicles to a Euro 4 or Euro 5 specification (30% and 69% respectively)⁴. Across the borough, approximately 70% of bus services receive funding support/ subsidy from the council. Where services are subsidised, such as for some public routes and home to school transport, the council can specify the maximum age of a vehicle and minimum euro standards as part of contract procurement.

The remaining 30% of services operate on a fully commercial basis (i.e., no subsidy/ support from the council), which reduces the influence that the council has on the age of the vehicles used to provide those services.

² Exclusive: Idling enforcement branded 'not fit for purpose' as just a handful of fines issued during 2018, (AirQualityNews, 2018). URL: [Exclusive: Idling enforcement branded 'not fit for purpose' as just a handful of fines issued during 2018 - AirQualityNews](#). Last accessed 01 September 2022.

³ The Steering Group comprises officers from Air Quality, Public Health, Communications and Media, Parking Services, Highways and Strategic Infrastructure, Children and Families and Health Protection

⁴ 1% operate with Euro 3 specifications.

Taxis

Taxis include Hackney Carriages as well as Private Hire Vehicles. The council will adopt its new Hackney Carriage and Private Hire Licensing Policy from 01 November 2022, running for five years. This will mandate:

- Hackney Carriages and Private Hire Vehicles to be manufactured to a Euro 5 or higher specification from 01 November 2022. The council will not issue or renew licenses for older vehicles from this date. From 01 November 2024, this will mandate Euro 6 or higher specifications; and
- For Private Hire Vehicles, no vehicle shall be more than four years old when granted an initial license and no vehicle more than eight years old will be relicensed.

Prior to being granted a license, all vehicles are tested by the council at depots in either Middlewich or Macclesfield. Vehicles are licensed annually, to ensure that each vehicle meets the appropriate emissions standards. Licensed vehicles are tested every six months once they reach their fifth anniversary.

Taxi drivers are required to renew their license every three years from the date of issue. They must comply with the licensing policy and code of conduct. Currently, the code of conduct does not require drivers to switch off engines; however, this will be a requirement within the new Joint Hackney Carriage and Private Hire Driver's License Conditions that will be adopted from 01 November 2022.

Current Projects

The council raises awareness through its 'Show the Air you Care' webpage⁵. This explains how air pollution is caused and ways that everyone can contribute to improving air quality. This includes information on what engine idling is, how it worsens air quality and potential issues of idling in modern vehicles.

The Air Quality team were successful in their grant application to the Department for Environment, Food and Rural Affairs (Defra) in March 2022 to run an awareness campaign focusing on vehicle idling and domestic solid fuel burning. With this funding, it is hoped to develop campaigns that are continuous rather than adhoc, which should improve their effectiveness. The grant will be spent on facilitating communication methods, including:

- Visuals/ posters/ leaflets/ press releases;
- Radio campaigns – utilising four local radio stations to reach different demographics;
- Online:
 - On our awareness webpage;
 - A dedicated page for idling and domestic burning; and
 - Social media platforms.
- Schools Toolkit around vehicle idling;
- Advertising on pay and display parking tickets; and
- Installation of anti-idling signage around the borough, focusing on schools, taxi ranks and recreational areas.

⁵ Show the Air You Care (Cheshire East Council, 2022). URL: [Air quality awareness \(cheshireeast.gov.uk\)](https://www.cheshireeast.gov.uk/air-quality-awareness). Last accessed 01 September 2022.

Schools

Air Quality officers have produced an education package for schools to raise awareness within Key Stage 2 year groups. They are visiting schools around the borough (on a request basis) to educate them on what they can do to help improve air quality around their school. On the same webpage, there are also links to other important information and toolkits, such as the Sustainable Modes of Travel to Schools (SMOTS) strategy and to Modeshift STARS, which aim to increase the number of trips made to school by sustainable and active modes of transport.

Some schools across the borough are starting to invest in, and deploy, no parking/ stopping signs around their respective entrances. Static cameras are also being trialled at some schools where there are persistent parking issues to help CEOs with enforcement during the start and end of the school day. Both initiatives support, and reinforces, the messages within the councils' campaign and encourages parents to park further away and walk their children to the school entrance.

Taxis

Due to reports/ concerns about idling at taxi ranks across the borough, diffusion tubes monitoring NO₂ were installed during 2020 on three taxi ranks at railway stations in Wilmslow, Macclesfield, and Crewe. Data is available for 2020 and 2021 and shows that the highest annual mean concentration of NO₂ occurred at Crewe Railway Station (27.8 µg/m³) during 2021, while levels of 20.3 µg/m³ were recorded at Wilmslow and Macclesfield Railway Stations. All three sites have higher concentrations of NO₂ than 2020, but this is likely to be associated with increases in traffic following national lockdowns.

Future Opportunities

Following a review of the baseline, this section outlines future opportunities for the council that could help future anti-idling campaigns, while reducing emissions from its current fleets' operations.

A More Co-ordinated Approach

There are several projects across the council that directly/ indirectly help to improve air quality and tackle engine idling. While the AQAP demonstrates there is some cross working between different services within the council (e.g., Air Quality and Highways Officers meet every six weeks to discuss air quality issues and how the Local Transport Plan funding should be allocated), this approach could be co-ordinated through the existing Programme Management Office (PMO) to maximise benefits from projects. This also extends to the private sector partners, who are continuously developing innovative solutions and bringing them to the market.

Continuing to expand existing working relationships between designers and planners and making them aware of where air quality issues exist may help to influence the design during early stages of scheme development.

Buses

Although the council was unsuccessful with its Bus Service Improvement Plan (BSIP) funding bid, an Enhanced Partnership has operated since May 2022, which applies to all commercial and subsidised bus services. A key element of this Partnership is to develop an action plan within 12 months of the commencement date (by May 2023), which will include a requirement for the existing bus fleet to be retrofitted to Euro 6 standards. This Partnership provides a framework to encourage bus operators

to use lower emission vehicles⁶ and to share best practise (e.g., driving techniques and turning off engines at layover areas/ bus stations).

Taxis

With the new licensing policy being adopted from 01 November 2022, and with some protection rights for existing licence-holders, any changes will come into effect gradually over the course of the policy period. However, monitoring data for 2022⁷ shows small increases in NO₂ at the taxi ranks outside Wilmslow, Macclesfield and Crewe Railway Stations when compared with 2021. Therefore, the council should continue monitoring these sites so that appropriate interventions can be put in place if needed.

Awareness Campaigns

Internal

The AQAP states that an eco-driving course has been developed for all council staff who drive for work. This outlines techniques that drivers can use to reduce emissions generated by their vehicles, which will help to improve air quality and reduce carbon emissions from the existing council and grey fleet. This course is also available to contractors and the wider supply chain who deliver services on behalf of the council.

It is important for staff representing the council to set an example on the public network to demonstrate that the council is leading the way. Going forward, all staff should be required to complete a refresher training course, which will capture any changes/ development in technology. The council could also consider extending the training to family members of employees, contractors, and the wider supply chain to improve driving efficiency across the borough and to support promotion/ education campaigns.

External

The council should continue working closely with schools to educate children about the impact that engine idling has on the environment. The council should also consider whether more emphasis can be placed on the effectiveness of School Travel Plans.

Anti-idling signage could be considered, using Defra grant funding, with a focus on schools, taxi ranks and recreational areas. This signage would need to be located appropriately/ sensitively to minimise street clutter.

The council could consider working with neighbouring local authorities (e.g., Cheshire West and Chester Council) to promote, and educate on, the negative impacts of vehicle idling and myth busting campaigns. This would allow resources to be shared and potentially increase the reach of promotion and education campaigns.

⁶ Includes monitoring future opportunities to acquire funding from central government to help with the transition of the existing bus fleet to lower emission vehicles. An application for funding to ZEBRA or an equivalent funding source should be considered in the future, if eligible.

⁷ Diffusion Tubes (NOx) and Air Quality Management Areas (Cheshire East Council, 2022). URL: <https://opendata-cheshireeast.opendata.arcgis.com/maps/58a0da9395064b16a8ff52be80c3e5af/explore>. Last accessed 06 September 2022.

Potential Options

Following liaison with the working group, and a review of baseline conditions and current projects, the potential options that the council could consider are summarised in the table below, alongside their benefits and disbenefits.

Option		Benefits	Disbenefits
1	<p>“Do Nothing”</p> <p>The council would continue running promotion/ education campaigns but would not adopt the legislation.</p>	<ul style="list-style-type: none"> • Delivery of one of the measures in the approved AQAP. • Educates the Council’s fleet, employees using their own cars for Council business and contractors. • No extra finance or resource implications involved with adopting the legislation. • Potential opportunities to collaborate with neighbouring local authorities and delivery partners, which could increase the reach of campaigns. • Highlights the adverse impacts on the environment of unnecessary vehicle idling. • On-going community engagement through campaign work to encourage behavioural change. • Targeted patrols and campaigns could be run outside schools, taxi ranks, construction sites and other relevant areas to try and change behaviour. • Use of social media, schools bulletin, website, local press, etc to deliver the campaign. • No need for new FPNs to be printed. 	<ul style="list-style-type: none"> • Messaging needs to be clear for council employees, contractors, and supply chain. Potential for adverse social media if council/ contractor/ supply chain vehicles are seen idling (e.g., during a lunch break). • Resourcing required to plan and implement the campaigns. • Cost implications associated with the design and production of leaflets and posters etc, although central government funding is available to help prepare and run campaigns. • The council would lack the legislative powers to effectively deal with idling engines and any complaints that may arise.
2	<p>“Stop Campaigns”</p> <p>The council would stop running promotion/</p>	<ul style="list-style-type: none"> • No extra finance or resource implications for adopting legislation. 	<ul style="list-style-type: none"> • The council would lack the legislative powers to effectively deal with idling engines and any complaints that may arise.

Option		Benefits	Disbenefits
	education campaigns and would also not adopt the legislation.	<ul style="list-style-type: none"> Removes costs associated with running the promotion/ education campaigns (e.g., production of leaflets). 	<ul style="list-style-type: none"> Limits the impetus and opportunities to engage with the public and businesses on the issue of air pollution. Would not deliver measure GN12/2020 in the approved AQAP.
3	<p>“Adopt Legislation Only”</p> <p>The council would adopt the legislation but cease all promotion/ education campaigns.</p>	<ul style="list-style-type: none"> Provides the council with the legal powers to effectively deal with idling engines and any complaints that may arise. Removes costs associated with running the promotion/ education campaigns (e.g., production of leaflets). 	<ul style="list-style-type: none"> Signs needed to help enforce the legislation. More street clutter and cost. Cost of training CEOs who would carry out enforcement. Extra resources needed for enforcement. The method for issuing FPNs is very confrontational, and CEOs may face additional abuse because of enforcing this legalisation. Potential for a reduction in engagement from the public and businesses with council-led promotion/ education campaigns. Could be seen as a ‘money making’ exercise for the council. More resources required within notice processing team due to challenges arising from FPNs and chasing unpaid fines etc.
4	<p>“Adopt Legislation and Continue Promotion/ Education Campaigns”</p> <p>The council would adopt the legislation and continue promotion/ education campaigns</p>	<ul style="list-style-type: none"> Delivery of one of the measures in the approved AQAP. Potential to combine media campaigns with day(s) of action utilising the FPN only for those not turning off the engine when asked. See benefits for Options 1 and 3. 	<ul style="list-style-type: none"> See Disbenefits for Options 1 and 3.

Conclusions and Recommendations

The purpose of this review is to identify options that help to change behaviours and reduce instances of engine idling, while making the most efficient use of resources. The borough generally has good air quality, and it is improving, as shown by the number of AQMAs reducing from 18 to 12.

Results from the 2022 survey suggest that the promotion/ education campaigns ran by the council over the past two years have started to change behaviours, with less idling occurring outside schools. It has also demonstrated that idling could be more prevalent in winter, when drivers keep engines running to help retain heat within their vehicles.

Issuing FPNs is very confrontational for CEOs, as they must ask drivers to turn their engine off and only issue an FPN if the driver refuses to do so. This confrontational approach is likely to be a reason why other local authorities that have adopted the legislation issue so few each year.

Additionally, legislation is considered as a last resort when promotion and education campaigns are ineffective. As the number of AQMAs has reduced (and are linked with emissions from vehicular traffic), this suggests that these campaigns are effective and gradually changing driver behaviours. Developments in technology and more efficient vehicles are also helping to reduce emissions from vehicular traffic. Funding is also available from central government to support promotion/ education campaigns, which means that campaigns can continue in the future.

It is recommended that Option 1, “Do Nothing” (the council would continue running promotion/ education campaigns but would not adopt the legislation), is implemented. Continuing promotion/ education campaigns demonstrates to the public and businesses that the council is taking the matter seriously by raising awareness and providing training to staff, contractors, and supply chain partners. It also will help to continue the work that the council has done to date in educating drivers on the adverse impacts of engine idling on the environment and their vehicles.