

## **The Case for Reducing Usage of Wood Burning Stoves:**

### **Summary:**

In light of the government's clean air strategy, 2019, and the fact that more powers are due to be transferred to local authorities, it is important that Warwick District Council actively tries to improve its air quality. Since wood burning stoves are a key cause of poor air quality, residents must be informed of the dangers of using certain appliances to their health. Additionally, there is current legislation that means that smoke free zones are currently enforced in the district. Therefore, a media campaign would be appropriate to make residents aware of these facts, and what practical steps can be taken in order to help improve air quality.

### **Introduction**

In light of the UK government's 2019 Clean Air Strategy which sets out the ways in which air quality will aimed to be improved, it is important to note that wood burning stoves are a significant contributor air pollution. The government reports that wood and coal being burnt in stoves and open fires contributes to 38% of UK PM 2.5 emissions, leading to a variety of health issues. Not only this, but according to the NHS (2016), poor air quality is estimated to contribute to 40,000 UK deaths per year in the UK. This means that the government are working actively to try and reduce pollution from wood burning stoves. Warwick District Council, therefore, can work with communities and local organisations in an attempt to inform people of the dangers of wood burning stoves.

### **The Pollutants:**

Household wood burning stoves release numerous chemical pollutants from their fuels, including fine particulate matter, nitrogen oxides, sulphur oxides, carbon monoxide, volatile organic compounds (VOCs), dioxins and furans.

Arguably, the most dangerous form of these pollutants is particulate matter. This is because particles which are less than 10 microns in diameter can be inhaled deep into the lungs alveoli. These are small sacs which allow oxygen to enter the blood. Consequences of this include breathing difficulties, lung damage, cardiovascular issues, allergies, eye irritation and headaches. Therefore, this is important because of the potential impact and quality of life reductions for residents of the district.

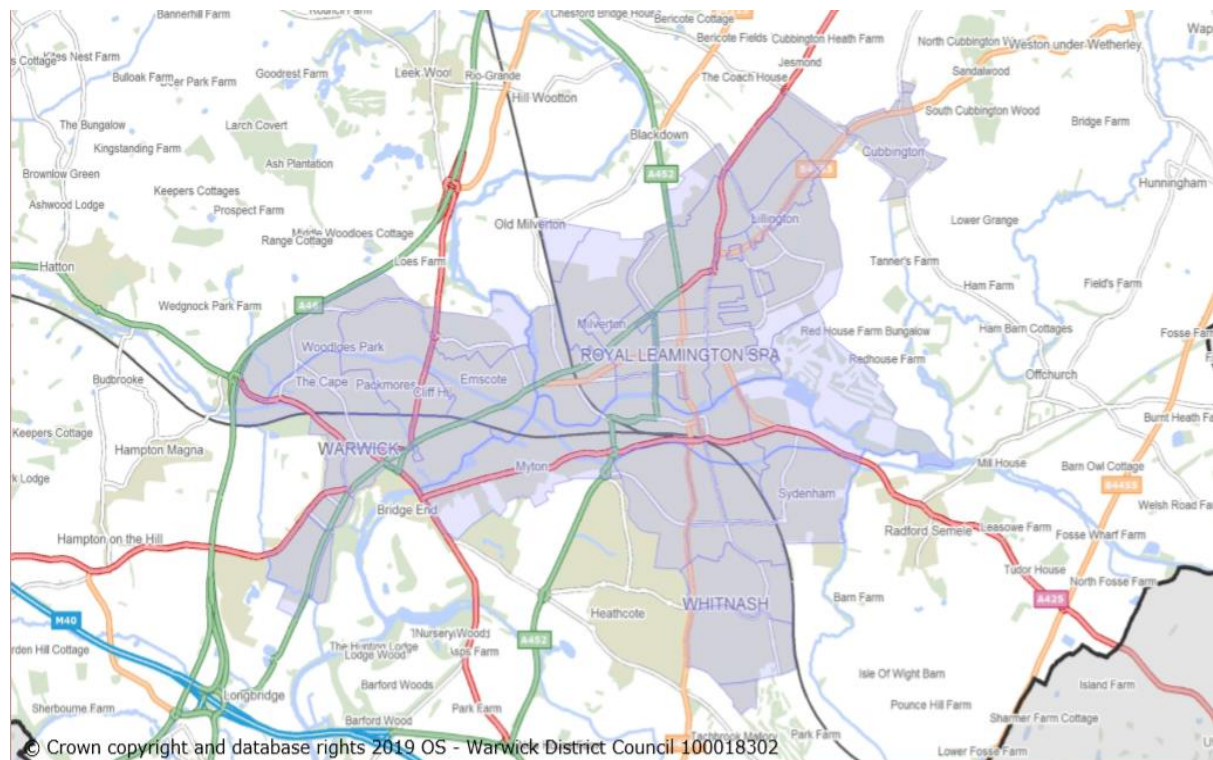
## Current Government Legislation:

Local residents should be aware that the Warwick District Council's area contains two smoke controlled areas, including Warwick, Leamington Spa and Kenilworth (see maps below).

Under the 1993 Clean Air Act, it is a criminal offence to produce smoke from a chimney in one of these areas. This means that any fuel which produces smoke is not permitted. However, if you have a wood burning stove in your home you can still use it, but you must use fuels which are approved by DEFRA (which should be smoke free). Visit the following site to see the link: <https://smokecontrol.defra.gov.uk/fuels.php>

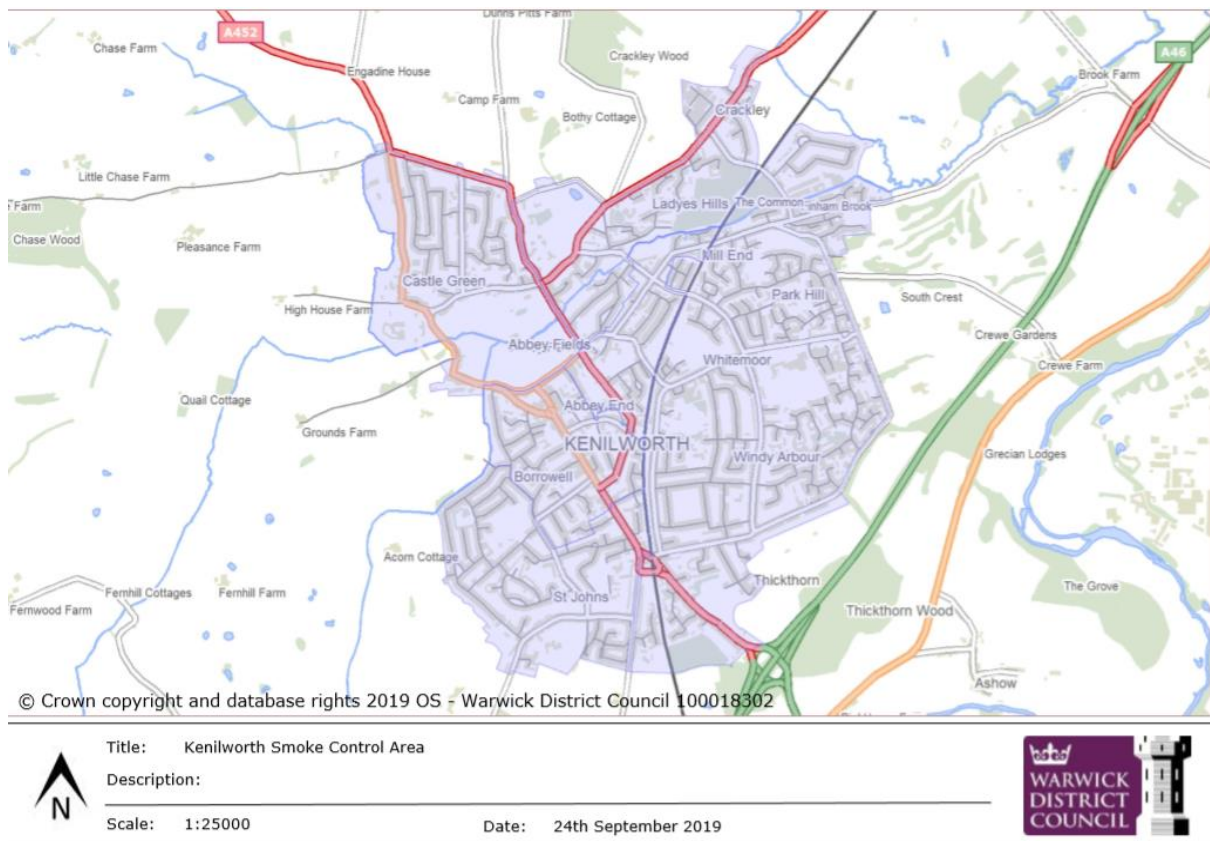
Additionally, the 1993 Clean Air Act states that dark smoke cannot be emitted from a chimney, regardless of whether it is in a smoke controlled area.

DEFRA have also produced a list of appliances which can be used in smoke control areas, however, only certain fuels may be used so you cannot burn anything that you want to in these appliances. See the following website: <https://smokecontrol.defra.gov.uk/appliances.php>



	Title: Leamington Spa and Warwick Smoke Control Area	
	Description:	
	Scale: 1:50000 Date: 24th September 2019	

This map shows the smoke controlled area in Leamington Spa and Warwick, and it is an offence to produce smoke from a chimney in the purple area.



This second map shows the smoke controlled area in Kenilworth, where it is also an offence to produce smoke from Chimneys in this area.

The UK government is also pushing a new strategy to improve air quality as part of its 2019 mission, and pledges to do the following:

- Legislation will be introduced to prohibit sales of the most polluting fuels
- Only the cleanest stoves will be sold by 2022.
- New powers will be given to local authorities in order to tackle pollution.
- Existing smoke control legislation will be made easier to enforce.
- A communication campaign will be developed to inform the public about environmental and health consequences of burning fuels.
- Products labelled with the 'ecodesign' sticker will be the only ones available in the near future and will have better air circulation that burns fuel more efficiently.

### **Practical Steps Residents Can Take to Reduce Air Pollution:**

The following steps can be used to inform residents of what they can do to reduce air pollution:

- Wet wood should be avoided as when heated, water evaporates and smoke is given off which then releases particulates.

- All wood to be used on wood burning stoves should have 20% or less of moisture content (look for the 'ready to burn' logo to ensure wood is dry enough).
- Use fuel such as hardwood with a maximum thickness of six inches to ensure good burning efficiency.
- If you have a stove that is more than ten years old, consider replacing it as new stoves release 80% fewer emissions of stoves 10 years ago.
- Make sure chimneys are swept regularly to ensure that smoke leaving homes is cleaner than it would otherwise be.
- Consider burning less fuel if your house is already warm enough.
- If you use house coal, then switch these to smokeless fuels which provide more heat but produce less smoke and carbon.
- Do not burn treated wood such as old furniture, plastic, household rubbish or arsenic.



Residents should look out for the 'defra approved' logo to ensure that fuels and appliances meet legislative standards.



Residents should be informed of the 'ready to burn' logo on fuels that they purchase to ensure that wood is dry enough so smoke is minimal.

**Key Community Groups and Organisations to Contact:**

There are several groups in society that are more at risk to air pollution from others. These include: those with existing lung diseases (e.g. asthma, bronchitis, emphysema and pulmonary disease), those who work outdoors, over 65s, children, those exposed to second hand smoke and people spending a lot of time near the road sides. These groups should be the priority for contacting with this information as they are most at risk of air pollution.

**Conclusion:**

In Summary, the content above has shown key messages that must be put out to the local community and organisations. These include air pollution dangers, legislation enforced currently and practical steps that residents can take. It is hoped that Warwick District Council can actively work within the locality to improve its overall air quality from wood burning stoves.