

CLEANER AIR FOR ALL ON THE WATERWAYS

Information and advice about air pollution and boats, including details about mooring in the Newham Mooring Zone



**Canal &
River Trust**
Making life better by water

Newham London

AIR POLLUTION AFFECTS US ALL.

The Government is increasingly committed to reducing air pollution in our cities as tighter controls to reduce road vehicle and domestic emissions are put in place.

Inland waterway corridors provide a cleaner, greener space for walking, cycling and recreational activities. Trees and vegetation along the waterways help clean the air and regulate the environment for people and wildlife to flourish.

While boats are by no means a major contributor to urban air pollution concentrations^[1] they can have a localised impact on air quality.

Those most at risk from boat engine fumes are boaters themselves. Using cleaner sources of energy, like electric charging points, will benefit boaters' health and contribute to cleaner air for everyone.

Pollution and boaters

The two main types of local air pollution are nitrogen oxides (NOx) and particulate matter (PM). NOx is a gas that comes from burning fossil fuels including diesel and coal, and PM are tiny particles released when burning liquid fuels such as diesel and solid fuels like wood and coal. Pollution also comes from chemicals in cleaning products, toiletries and from cooking.

For boaters, running diesel and petrol engines and generators, and burning solid fuel in stoves are the biggest forms of pollution and will affect you and those around your boat.

Health impacts for boaters and wildlife

Both NOx and PM cause serious health problems. PM2.5 is so small you cannot see it. Particles enter the bloodstream and lodge in the organs – heart, brain and lungs. This can lead to diseases including cancer, heart problems, asthma, dementia and cause premature death.

NOx can also negatively impact wildlife, reducing biodiversity both through acidification of soils and through direct impact to plants and fungi and the insects, mammals and birds they support.



Burning solid fuel

There are two types of fuel; smokeless and non-smokeless.

Fuels are burned in either Defra-approved (or Defra-exempt) stoves or non-Defra approved stoves.

Burning smokeless fuel (not house coal or wood) in a Defra-approved stove produces the least amount of pollution. However, smokeless fuel **still creates pollution**. It does not produce visible smoke but it does produce PM2.5, a more dangerous form of pollutant due to its fine particulate size, according to the World Health Organisation.

Burning smokeless fuel in a Defra-approved stove produces **335 times** more pollution (PM2.5 at the point of use) than using electricity for heating.

Most of London, and **all of Newham, is a Smoke Control Area**. This means you can only burn smokeless fuel, or non-smokeless fuels with a Defra-approved stove. We encourage all boaters to

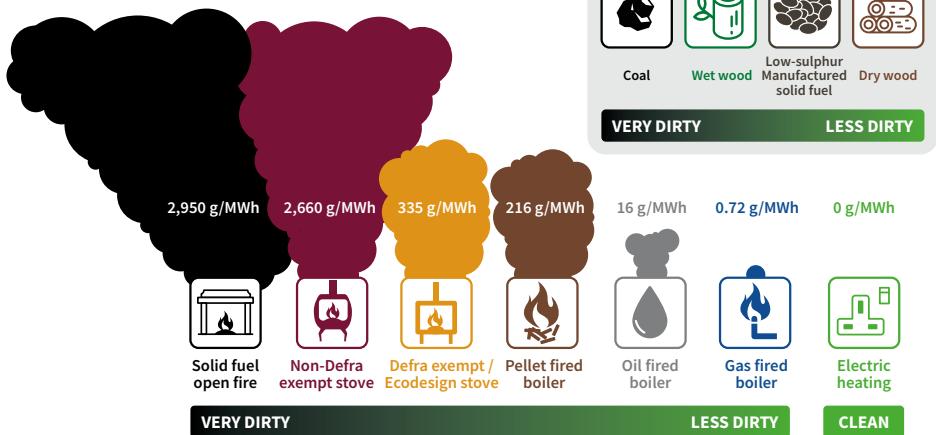
follow the same rules.

As emissions from canal boats are at low-level around the towpath, not at high roof-level like many houses, and canals are often in built up areas, dispersion is not so rapid.

A longer term aim is to remove the need for burning solid fuel to reduce harmful pollution on the inland waterways.



Relative PM_{2.5} emissions in your home from domestic heating methods



Smoke plumes are not to scale. Emissions factors show emissions in the home – emissions during production of fuel or electricity are not included here. Emission factors taken from EMEP 2016 Guidebook (1A4 - small combustion tables). The following definitions were used: Solid fuel open fire: wood burned on open fire; Non-Defra approved stove: wood in a conventional stove; Defra-approved / Ecodesign stove: wood in an advanced / ecolabelled stove; Pellet fired boiler: wood in pellet stoves and boilers; Oil fired boiler: fuel oil in a medium (>50kWth) boiler; Gas fired boiler: gas in a small (<50 kWth) boiler

Going green and clean

Every boat is different and costs will vary and change. We encourage all boaters to look into what changes can be made to their boat to make it more eco-friendly and less polluting. Email enquiries.londonsoutheast@canalrivertrust.org.uk to get in touch with the Canal and River Trust to discuss the barriers you're facing and we will try to help. For further help and advice visit: www.canalriver-trust.org.uk



London Borough of Newham is a Smoke Control Area, meaning you must abide by certain rules when mooring here, which will help reduce air and noise pollution and make the canal a healthier place for everyone.

1. Please **do not idle** your engine unnecessary
2. Try to heat your boat using electric heating, if you can. If you need to have a fire, only burn **smokeless fuel**. You can burn dry seasoned wood in a Defra-approved stove. Please do not burn house coal or other smoky fuels as these produce dangerous air pollution for you and your neighbours.
3. Be courteous to other boaters
4. Please show consideration to your neighbours. To keep it peaceful, please refrain from playing loud music and using loud power tools.

For further information concerning air quality and air pollution control in the borough, please contact: pollution.enquiry@newham.gov.uk

