Carbon International
Communications for the Environmental Economy

Press Release

Harmful School-Bus Exhaust Pollutants Removed by PowerTrap

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Greater Manchester transport chiefs are leading the way in protecting local school children from some of the most deadly airborne pollutants, known to cause serious respiratory illnesses.

The Passenger Transport Executive has fitted its entire fleet of 29 yellow school-buses with the PowerTrap, a device made by Manchester-based engineering firm Per-Tec, which can remove up to 99% of ultra-fine particulates from diesel exhaust emissions.

Peter Black, Environmental Planning Manager for Greater Manchester Passenger Transport Executive, (GMPTE) commented: “We took this decision as part of our sustainable travel plans to protect the lungs and health of our local school children as well as the rest of the people of Manchester. School children face enough danger from road and transport issues as it is, without the risks of ill-health from breathing in dangerous particulates.”

Ultra-fine particulates are one of the worst forms of air pollution. They pose a serious risk to respiratory health and are known to contribute to premature deaths as a result of carrying potentially carcinogenic compounds deep into the lungs, worsening asthma and causing heart damage.

It is children and the elderly who are particularly at risk.

In April the Government’s Air Quality Strategy Review admitted that air pollution from particulates is currently estimated to reduce the life expectancy of every person in the UK by an average of eight months, possibly more in urban areas.

In 2005 the Chartered Society of Physiotherapy analysed figures from 61 monitoring points across the UK showing that, in some spots, the concentration of particulates is getting worse. It has urged vehicle manufacturers to fit particulate-traps as standard.

Although particulates can come from a variety of sources, exhaust emissions from diesel vehicles such as buses, are the most common and prevalent culprits.

Pollution is far greater from older vehicles built before modern legislative emissions requirements were introduced. Unfortunately, this includes the majority of Britain's school buses. Until this generation of vehicles is phased out, or fitted with decent particulate traps, the dangers to air quality and public health will remain.

Per-Tec has estimated that fitting PowerTrap units to reduce emissions, improve air quality and protect public health, results in only a very minor increase in contract and running costs for responsible authorities.

"We've fitted the PowerTrap on all of our yellow school buses now and we are planning to fit more in the future onto some other public transport vehicles," Mr Black added. "We're happy with their performance and glad to be helping to improve our local air quality."

A key benefit of Per-Tec's PowerTrap is that it can trap and regenerate particulate matter even from a cold start. Many other systems need the engine to run for some time to reach a required temperature before effective regeneration can take place.

However, these temperatures are rarely reached in the high-traffic, low-speed urban conditions in which buses operate, often leading to blockages occurring in the filters. This can lead to vehicles being taken out of service and increases the number of times the filter has to be removed and cleaned at great cost to the fleet operator.

By contrast, Per-Tec's PowerTrap, based on electro-static precipitation, can never block. It simply replaces the silencer in a conventional diesel exhaust and performs dual function of noise abatement and particulate removal. As it cannot block, it never needs removing and is the ultimate fit-and-forget emissions reduction system.

It has been fitted to a variety of fleets and vehicles throughout the country including in-service taxis, light commercial vehicles, buses and other heavy-duty vehicles including emergency services vehicles.

Peter Kukla, Managing Director of Per-Tec said: "I think the GMPTE deserve praise for helping protect the health of local children and taking such a positive lead on air quality issues."

"We've had a number of enquiries from other bus fleets around the country since we started working with GMPTE, particularly urban fleets which are looking either to fit for the first time or replace other systems which are getting blocked-up or simply not reaching the required temperatures to work effectively. I look forward to working with all these fleets to help improve local air quality."

www.per- tec.com

Notes to Editors:

- Per-Tec's PowerTrap has been fitted to Manchester's yellow school buses as part of a wider range of sustainable travel plans across the city. To find out more please visit: www.gmpte.com
- Greater Manchester Local Transport Plan: www.gmltp.co.uk
- PowerTrap is effective from cold engine start. Independent tests have shown it reduces emissions of ultra-fine particulates by up to 99%.
- Due to its design, PowerTrap can never become blocked and therefore poses no risk of major engine related problems due to high exhaust back pressure.
- PowerTrap has extremely low fuel-penalty of less than 1% so will not increase fuel consumption.
- PowerTrap is an extremely adaptable, lightweight, low-cost component that can work with any kind of diesel engine and requires no annual maintenance. Simply fit and forget.

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