

## Urban Artic Brewers Dray Vehicle



A brewery distribution company based in the northern Home Counties uses a fleet of “urban artics” to distribute drinks products in Central London. The vehicles are tractor units and single axle semi-trailers plated at 18 tonnes gross train weight (GTW). They have an expected service life of fifteen years.

These vehicles are within scope of the London Low Emission Zone (LEZ) with effect from February 2008 because they exceed 12 tonnes gross vehicle weight (GVW). This means that to operate within the proposed LEZ from 2008 they would have to conform to a minimum standard of Euro III for Particulate Matter (PM) to enter the LEZ, rising to a standard of Euro IV for particulate matter in 2012.

A proportion of the fleet were bought new and first registered since October 2001 and consequently, they have engines type approved to Euro III. These vehicles may continue to operate within the LEZ zone with no action needed in 2008 since the vehicle registration mark will be on the Transport for London (TfL) database, identifying them as compliant. However these will need to take action before 2012, when the emission standard is tightened to Euro IV for particulate matter.

Some of the vehicle fleet are older, ranging from a date of first registration of October 1998 to October 2001. These vehicles have engines type approved to Euro II and are therefore not usually compliant with the LEZ standards in 2008. However, there are instances when engines of this age do conform to the LEZ standards, in relation to PM. To find out if this is the case the operator would need to check the engine type displayed on the manufacturer's plate, usually located on the driver-side door, and see if the engine is listed on the Low Emission Certificate (LEC) Eligible Engines List - available on the Transport for London website (<http://www.tfl.gov.uk/roadusers/lez/vehicles/options/5374.aspx>). If the engine appears on the LEC list, the vehicle operator may apply to a VOSA test station for the vehicle to be inspected and to undergo a smoke test. If it passes the test, which is more stringent than the usual MOT smoke check, a LEC may be issued. This certificate, renewable annually, makes the vehicle a compliant vehicle for the London Low Emission Zone.

Engines prior to Euro III that do not appear on the LEC Eligible engines list will not be compliant with the LEZ standards but it is possible to retrofit these vehicles with particulate

abatement equipment which should enable them to become compliant with the proposed LEZ standards. For these vehicles any Diesel Particulate Filter (DPF), or engine installation, approved under the Reduced Pollution Certificate (RPC) scheme will result in the vehicle being compliant with the LEZ in 2008, since they will meet the Euro III standard for PM, and many of the DPF devices will also meet the tighter Euro 4 PM standard required by the LEZ in 2012. The RPC scheme, managed by the Vehicle and Operator Services Agency (VOSA), also permits the operator to tax a qualifying vehicle at a reduced rate of Vehicle Excise Duty (VED). Where a RPC conversion is not available for a particular vehicle, it may be possible to retrofit with PM abatement equipment approved on the LEC Approved Adaptations List, which is published on the Transport for London website at:-

<http://www.tfl.gov.uk/roadusers/lez/furtherinfo/5074.aspx>.

These retrofit devices will bring the vehicle up to a minimum of Euro III standard for PM.

Before 2012 the Euro III vehicles within the fleet will have to take action, and again may consider fitting an RPC certified abatement device, dependent upon the remaining life expectancy of the vehicle. In addition, particularly where an RPC is not available, a particulate abatement device approved on the LEC Approved Adaptations List could also enable the vehicle to become compliant with the LEZ standards after 2012.

A few remaining fleet vehicles were first registered prior to 1998. These vehicles have engines type approved to pre-euro or Euro I standards. Whilst it is still possible to retrofit these vehicles, and obtain an RPC, this would only gain free entry into the LEZ until 2012, since they would not meet the tighter Euro IV for particulates emission standard. Furthermore, some diesel particulate filters which utilise a catalytic regeneration process may not be suitable for older engines which have poor oil-control. More importantly, the residual value and remaining life expectancy of these older vehicles mean that the investment in a particulate reducing retrofit system may be difficult to justify. A more pragmatic option would be to re-allocate these vehicles to other delivery areas, avoiding the LEZ and possibly to earmark them for early replacement with LEZ compliant vehicles.