



Old Vehicles Banned from German Cities

German motorists are confused. There are rumours of tough clean-air laws, inner city bans on vehicles, dramatic loss of resale value in older cars. Buzz words such as particulate matter (PM), driving ban, environmental zone or particulate filter are in the air, with a lot of half-knowledge thrown into the mix. We would like to explain the issues and provide answers to questions relating to the new German vehicle-labelling scheme.

What is the legal situation? Seven years ago, the EU passed an air-quality Directive defining the PM limit of 50 micrograms per cubic metre of air which can only be exceeded on 35 days a year. Driving bans will be enforced based on a German government regulation from May 2006 requiring low-emission passenger cars, HGVs and buses to be labelled according to their PM emissions (see box). The scheme will take effect on 1 March 2007.

What is particulate matter? Particulate matter is invisible to the eye. Particles have a diameter of less than 10 micrometres ($1\mu\text{m}=1/1000\text{mm}$). PM is either natural or man-made (e.g. industrial or household emissions). Road traffic generates PM, e.g. from tyre abrasion, dust dispersion and emissions – notably from diesel vehicles not equipped with particulate filters (DPF). PM cannot be filtered by the human body and may be carried to the lung alveoli. It may cause respiratory or cardiovascular diseases.

Who has the authority to designate restricted areas? The federal states must establish clean-air plans allowing local authorities to impose traffic restrictions. On this basis, local authorities may decide exactly on which streets or in which areas traffic should be restricted and to what extent. Areas with high levels of PM emissions may temporarily or permanently be declared "environmental zones" and made inaccessible to certain vehicles.

Which cities are planning driving bans? So far, only large cities are planning bans. Cities known to be planning "environmental zones" are Munich and Dusseldorf (probably from October 2007), Stuttgart (no later than January 2008) and Berlin, Cologne, Frankfurt/Main and Karlsruhe (probably from January 2008). Other cities are still keeping their options open.

Which vehicles are affected? Primarily, vehicles with high PM emissions will not receive the low-emission sticker and will be banned from entering "environmental zones": diesel vehicles compliant with the Euro 1 emission standard and below (year of manufacture prior to the mid-1990s) and petrol vehicles not equipped with controlled catalytic converters (prior to the early 1990s) and some older vehicles equipped with catalytic converters. Motor bicycles and tricycles, agricultural tractors, police and fire brigade vehicles as well as ambulances are exempt from such bans.

Are there any exemptions for residents or owners of historic vehicles? The German federal regulation does not define such exceptions. Whether to grant any exemptions is still being debated. As this is in the jurisdiction of the state environment ministers, the outcome will depend on them, meaning that there will be different regulations in the relevant cities. Periods of transition are also being discussed to alleviate the impact on businesses and residents. ADAC is invoking the principle of reasonableness, disqualifying actions imposing heavy restrictions on individuals without bringing about notable improvement. Neither should residents be barred from driving to or from their homes nor should historic cars, whose emissions impact air quality only minimally, be banned from restricted areas.

How will restricted areas be marked? »Environmental zones« will be designated by regulatory signs (see box). Supplemental signs will show the sticker colour required to enter the zone. **Note:** Foreign registration passenger cars and HGVs travelling in Germany will also be subject to the sticker requirement. At this stage the-

re is no information available as to how this will be implemented.

What are the fines? Motorists entering a restricted area without the proper sticker will be liable to a €40.00 fine and a penalty point on their driving record. However, there is no general obligation to use the sticker. Only motorists intending to drive in »environmental zones« must display the sticker.

Where can the stickers be obtained and how much do they cost? Stickers are available at vehicle registration offices and wherever emission tests are performed. The fee is expected to be about € 5.00 to €10.00. ADAC believes that stickers should be free of charge – and even mailed to motorists. Otherwise the owners of clean vehicles would be penalised. The stickers should be available no later than 1 March 2007, when the law will take effect.

Where should the stickers be displayed? The sticker should be displayed in a visible spot on the inside of the windshield.

Can vehicles be made compliant by retrofitting? Retrofit catalytic converters for petrol vehicles are scarce whereas retrofit particulate filters for diesel vehicles are available for an increasing number of vehicle types. However, it will not be possible to retrofit every old diesel vehicle to qualify for a red sticker at least. Accessory manufacturers are unwilling to risk the cost of developing DPFs for rare models. Detailed information on who provides retrofit solutions for which vehicles is available (in German only) on the ADAC website at www.adac.de/ in the Auto, Motorrad & Oldtimer; Umwelt section.

Will there be tax relief for motorists who retrofit their vehicles with DPFs? Two things should be borne in mind here. First, retrofit DPFs usually only reduce PM emissions, not other types of pollutant emissions. This is why retrofitted vehicles will keep their old Euro emissions classification as well as their tax classification.

Second, a one-time tax bonus for retrofitting is being discussed but is still subject to legislation which is expected to enter into force in April 2007. The details are fairly complex:

A €330 tax incentive will apply to new diesel passenger cars registered before 31 December 2006 and retro-fitted with effective DPFs between 1 January 2006 and 31 December 2009. After making the relevant entries into the vehicle documents, the vehicle registration offices will automatically notify the tax authorities.

Non-retrofitted passenger cars and new

vehicles failing to comply with the impending Euro 5 PM emission standards of 5mg per kilometre will be subject to an annual surtax of €1.20 per 100ccm from April 2007 to March 2011.

Are all new diesel vehicles equipped with the latest technology? Unfortunately, not all new diesel vehicles are appropriately equipped – take, for instance, the new Smart. ADAC advises buyers to make sure that their new car is equipped with the latest standard in DPF, eliminating up to 99% of PM emissions. Otherwise they will be liable to the above-mentioned surtax. This would not be fair – neither to motorists nor to the environment.

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The signs



Beginning and end of restricted area ("environmental zone"). A supplemental sign displays the types of colour sticker allowing vehicles to enter the zone.

The stickers



No sticker = emission level 1, i.e. petrol vehicles not equipped with a controlled catalytic converter and some older petrol vehicles equipped with 3-way CATs, diesel vehicles compliant with Euro 1 standard and below.

The red, yellow and green stickers are for vehicles compliant with emission levels 2 through 4, i.e. Euro 2 to 5 diesel vehicles and petrol vehicles with controlled CATs (the latter usually qualify for the green sticker). By retro-fitting their vehicles with DPFs, motorists may up-grade their vehicles' classification and obtain a red or yellow sticker.

Details on whether your car is sticker-compliant are available (in German only) on the ADAC website at <http://www.adac.de/> in the Auto, Motorrad & Oldtimer; Umwelt section.