

11/10/09

Navistar's last-ditch SCR challenge

By: Alan Bunting, Tuesday, November 10, 2009, AutomotiveWorld.com

Truck maker Navistar's loudly proclaimed objections to selective catalytic reduction (SCR) technologies to control oxides of nitrogen (NO_x) diesel emissions look like going down to the wire - the wire in this instance being the January 1 2010 deadline for new trucks and buses in the US to comply with tougher emission limits.

The US Environmental Protection Agency (EPA) has asked a federal appeals court to delay, for 60 days, proceedings instigated by Navistar requiring the agency to 'review and reconsider' its 2009 guidance on the use of SCR for NO_x reduction. Earlier this year the manufacturer sued the agency, alleging that it did not follow the proper rule-making procedures in issuing SCR guidance.

For several years SCR, despite its widespread adoption in Europe, was frowned on by the EPA. This was largely because of perceived problems of enforcement, in ensuring the replenishment of the system's additional consumable: the urea-water solution needed to activate the SCR catalyst. The reductant, already familiar in Europe under the name AdBlue, is now being referred to in North America as diesel exhaust fluid (DEF). There was an added concern that cheap sub-standard DEF, typically (and literally) watered down, would find its way on to the market. Establishing coast-to-coast availability of approved-quality fluid was regarded by the EPA as a major obstacle.

Daimler's Detroit Diesel division clearly regards full EPA approval of its SCR technologies from January as a fait accompli.

But under pressure from North America's influential European-owned heavy truck builders, Freightliner and Volvo, the EPA was persuaded to take a more favourable view of the technology. It promised fuel savings and a CO₂ emissions reduction, when compared with the exhaust gas recirculation (EGR) alternative adopted till then by US heavy-duty engine makers and which Navistar continues to promote as the hassle-free route to NO_x control.

Since the announcement early this year of its marketing link with Caterpillar, the other erstwhile champion of EGR until it decided to pull out of the North American on-highway engine business, Navistar has appeared to strengthen yet further its aversion to SCR for meeting EPA 2010 requirements.

It is probably no coincidence that the 60-day 'stay' - to use the US legal term - requested by the EPA for Navistar's objections to SCR legality to be reconsidered expires on or about the January 1 deadline, when new trucks and buses compliant with the more stringent emission limits will start being delivered to operators.

Navistar's emission credit bank is obviously finite and the time will come when all its engines will have to physically comply with the much tighter limits.

Daimler's Detroit Diesel division, the in-house supplier of most engines for the group's class 8 Freightliner and Western Star marques, clearly regards full EPA approval of its SCR technologies from January as a fait accompli. It has said in a written statement that Navistar's pending appeal 'will not delay introduction of our SCR technologies or affect certification of our 2010 engines'.

Many observers reckon that the Navistar protests are now a lost cause. The truck maker concedes that several of its engines will satisfy EPA 2010 requirements, without the help of SCR, only through its use of so-called emission credits, 'earned', ie accumulated, during the last three years by a specified number of engines that have complied with EPA 2007 limits by a measurable margin.

Under unique US rulings, those 'brownie points' can be used as a means of offsetting the need to meet fully the demands of 2010 legislation. But Navistar's emission credit bank is obviously finite and the time will come when all its engines will have to physically comply with the much tighter limits. Many say that a Navistar U-turn on its EGR vs SCR pronouncementss will then be inevitable.