



SCR, EGR Proponents Square Off

March 24, 2009 Tom Berg, Truck Editor

Navistar [International](#) executives used the Mid-America Trucking Show to scorn competitors for using expensive SCR to meet upcoming exhaust limits and, at the same time, to promote their "Advanced EGR" approach that includes higher amounts of cooled exhaust gas. Competitors soon shot back from an unusual "summit" where executives defended SCR as entirely workable and beneficial to customers and the public, and refuted all of Navistar's charges.

Navistar hired an auditorium adjoining the expo center in Louisville, Ky., to host hundreds of customers and dealers at a gala sales rally on March 18. Here, in the latest effort of an on-going campaign, they enthusiastically pitched their Advanced EGR ([exhaust-gas recirculation](#)) as a simpler way to meet 2010 exhaust regulations. And they warned of alleged pitfalls to competitors' SCR (selective catalytic reduction) approach, which requires injection of a urea substance into the exhaust.

Navistar executives, led by Truck Group President and CEO Dee Kapur, predicted that long-haul truckers will have trouble finding diesel exhaust fluid (DEF), that it probably will be expensive, that keeping tanks full will be a hassle, and that drivers will be exposed to dangerous fumes while handling it. International truck owners and drivers won't have to bother with DEF, and they won't notice anything different about vehicles built starting next January.

But harsh criticism of SCR is "a lot of marketing over matter," countered Denny Slagle, president and CEO of [Mack Trucks](#), at the competitors' summit the next morning. "All of us up here today know EGR, we're experts in EGR, and that's why we're using SCR." High heat from EGR puts stress on engines and more of it in 2010 will result in too much stress, he said.

He and colleagues from Daimler, [Volvo](#), [Cummins](#) and key suppliers all reiterated that SCR is now being successfully used in Europe. [Distribution of DEF](#) there is widespread and the fluid is reasonably priced, and the same thing will happen here. [Cummins](#) will have DEF at scores of distributors by October and in 8,000 locations as 2010 unfolds. TA, Petro and Pilot will all sell the fluid starting at hundreds of truck stops late this fall and expand its availability throughout next year.

The [Environmental Protection Agency](#) is satisfied that availability of diesel exhaust fluid for SCR is being taken care of, and officials are no longer concerned about its supporting infrastructure, said Byron Bunker of the agency's Office of Transportation and Air Quality. EPA has not taken sides on the SCR vs Advanced EGR issue; EPA set the limits and manufacturers decided how to meet them. But "the industry stood up and took responsibility," Bunker said in praising their efforts.

Kapur charged that DEF is "toxic and volatile," but a maker of the fluid said it's nontoxic, biodegradable and won't harm anyone who happens to touch it or breathe its vapors. Diesel fuel, motor oil and windshield washer fluid are all toxic, "and we handle them safely every day," said Chris Patterson, president and CEO of Daimler Trucks North America, which includes [Detroit Diesel](#).

Competitors have previously acknowledged that their SCR equipment will add 300 to 400 pounds to a truck's weight and complicate mounting of some bodies and auxiliary axles – a point made by Navistar at its sales meeting. Navistar executives also charged that the bulky equipment will require longer frames and wheelbases, but competitors have begun showing SCR configurations that will allow "clean" frame-tops and close mounting of bodies behind cabs.

"According to the sole adopter of massive EGR, we've all made the wrong choice," said Per Carlson, president and CEO of Volvo Trucks. "This will certainly come as a surprise to the many customers around the world who are already using SCR, very successfully. Fuel economy is what customers demand, and fuel economy is what SCR delivers."

Extensive testing shows that their 2010 engines will use 3 to 5 percent less fuel, said Cummins, Daimler (which includes [Detroit Diesel](#)), Volvo and [Mack](#) (both of which use engines from Volvo Powertrain). This comes partly from eliminating most if not all active regenerations of diesel particulate filters, which requires injection of fuel. Better fuel economy will more than offset the cost of buying DEF, which will be "dosed" at about 2 percent of fuel use, and pay off the cost increase for 2010 equipment in a few years.

Advanced EGR will lower the total cost of ownership for [International](#) customers, said Navistar executives, suggesting that International engines might cost less than competitors' to buy. However, in a speech later in the week, Dan Ustian, Navistar International's chairman, president and CEO, said \$25,000 per truck is the cost of compliance with the EPA's 2010 diesel emissions limits, though he didn't say if that's what Navistar intends to charge.

Neither Navistar nor most other truck builders have announced their 2010 pricing. Only one has: Volvo Trucks said it will impose a "nonnegotiable surcharge" of \$9,600 per truck. A sales manager from sister company Mack acknowledged that its prices will be "in the same ballpark."

[EGR and SCR in off-road engines](#)