

## **Diana, Sherri A. (CDC/NIOSH/EID) (CTR)**

---

**From:** Ted Siska <smoke\_blotter@msn.com>  
**Sent:** Thursday, December 22, 2011 11:46 AM  
**To:** nfa-evaluation@dhs.gov; nhtsa.ems@dot.gov; nicc@dhs.gov; nicholas.dejesse@dhs.gov; nicole.aimone@associates.dhs.gov; NIOSH Docket Office (CDC); noah.smith@dot.gov; nofear@opm.gov; norman.ashford@dhs.gov; NCHS NSFG (CDC); Occupational Asthma Prevention (CDC); ohioCitizenCorps@dps.state.oh.us; osfm.engineer@po.state.ct.us  
**Subject:** Legal or Outlaw Diesel Smoke Exhaust Removal Systems

Diesel exhaust smoke is by far the greatest occupational health hazard at fire stations because carcinogenic smoke exposure affects firefighters, emergency medical technicians, office staff, and even neighbors living near a fire station. The health risk grows more acute as diesel propulsion becomes the engine of choice for virtually all new fire trucks and the majority of new ambulances.

Advances in both diesel fuel and diesel engine technology during the past five years aim at reducing hydrocarbon emissions by running cleaner fuel at much higher temperatures. Apparatus built to Truck Manufacturer's Association Standards and NFPA 1901 allow tailpipe exit temperature of 851F (four times the boiling point of water) which makes drop hoses connected to a rooftop ventilator more dangerous for the individual attaching the hoses to a scorching hot tailpipe. In addition, operating temperature limit of most hose is 400F.

Traditional drop hose local ventilation has been in widespread use since World War II, long before diesel became predominant in emergency vehicles. Over the past five years, extreme exhaust temperature coupled with mandatory tailpipe heat shield deflectors making hose nozzle attachment more difficult, forced progressive fire departments look to on-board filtration systems as the most attractive means to reduce diesel soot in the workplace. Improving workplace environment is a necessity, both from an occupational liability standpoint as well as concern for human health; and many fire departments have funded this effort through FEMA Grants.

While there are virtually no meaningful, measurable diesel smoke exposure standards published by OSHA, NIOSH or NFPA, retrofit aftermarket motor vehicle exhaust systems are regulated by the federal government. Under rules of compliance to the federal Clean Air Act and every state's CAA Implementation Plan, non-stock aftermarket exhaust components and systems must be either EPA verified or Executive Order (also called an Exemption Order) by California Air Resources Board (CARB), as promulgated by the federal Clean Air Act US Code Title 42 Chapter 85 subchapter 13 (3) (A) (3) (B) section 7522, and US EPA Office of Enforcement and General Counsel Memorandum 1A of June 25, 1974 and its subsequent clarifications, and the EPA Exhaust System Repair Guidelines of March 13, 1991. For forty years every Grant, and indeed every procurement federally-funded, must comply with the Clean Air Act and EPA regulations by Presidential Executive Order 11738 signed by Richard M. Nixon. Armed Services Regulations for Management, Acquisition and Use of Motor Vehicles likewise require strict compliance to the Clean Air Act, and EPA-CARB Emissions Standards for all vehicles.

Voluntary retrofits of fire trucks, ambulances, and other emergency vehicles are not exempt from those laws. While non-compliant aftermarket devices neither EPA-verified nor CARB Aftermarket Parts Division Executive Order exempt are available for sale, and may even be listed on the GSA Federal Supply Schedule, those devices may not be legally bought nor installed on any vehicle except for race cars, show cars never driven on the street, and military tactical vehicles (tanks, amphibious assault vehicles, artillery pieces and the like).

The Ward 79 No Smoke system is a non-stock aftermarket diesel exhaust filtration system which interrupts the stock engine exhaust system (First Gas Flow Means) and diverts either to the original factory supplied and approved muffler or catalytic converter (Second Gas Flow Means), or diverts and bypasses and rendering inoperable the stock approved and legal factory supplied muffler or catalytic converter, and diverts the exhaust to an unapproved, unlisted, non-verified untested filter of its own manufacture (Third Gas Flow Means). The system performs a different function than the stock system, which the potential bidder describes its system in the following way: "the diverter unit shall be installed in the existing exhaust pipe and shall direct the engine exhaust either through the filter element or through the muffler"; and the configuration is clearly shown in both its patent and illustrations of its component parts.

Not only is the Ward 79 No Smoke system not EPA-verified nor CARB-E.O. compliant, Section 203(a) (3) of the Clean Air Act prohibits the manufacture, selling, or installation of any device that bypasses, defeats, or renders inoperative a required element of the vehicle's emissions control system. It is prohibited by Memorandum of Office of Air & Radiation

March 13, 1991 and state and federal Anti Tampering Law, and under Section 205 of the Clean Air Act, subject to a maximum civil penalty of \$25,000. for each motor vehicle or motor vehicle engine, (except show cars, race cars, and military tactical vehicles) as defined in the EPA Tampering and Defeat Device Civil Penalty Policy of February 28, 1994. Although the Ward 79 system is available through the Federal Supply Schedulen (GSA Contract GS-07F-0246L) and several sales have been funded by

FEMA Grant and direct purchase through GSA (particularly by the military) of a retrofit non-compliant unlisted aftermarket exhaust system is, and long has been, forbidden by federal and state law. Ward 79 No Smoke system violates the federal Anti Tampering Law. Installation of a non-compliant system is a violation of the Clean Air Act that commits fraud upon the United States Government. The GSA Federal Supply Schedule should not be used as a mechanism to circumvent national environmental laws. FEMA Grants cannot be used to fund federal crimes.