

STATUS OF APBF-DEC NO_x ADSORBER / DPF PROJECTS

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The Advanced Petroleum-Based Fuels – Diesel Emission Control Activity (APBF-DEC) is a Government/Industry collaborative research study aimed at identifying optimal combinations of fuels, lubricants, diesel engines, and emission control systems to meet projected emission standards through 2010. The research projects are co-funded and supported with in-kind contributions from the U.S. Department of Energy and other Government agencies, engine and vehicle manufacturers, catalyst manufacturers, energy and additive companies, and these industries' respective trade associations. Five separate projects involving light- and heavy-duty engine platforms are being conducted to measure the effects of fuel and lubricant composition on engine-out and tailpipe emissions. Three of these five projects are focused on emissions control systems using NO_x adsorber catalysts in combination with diesel particle filters. Ricardo, Inc., is using a heavy-duty line-haul engine, Southwest Research Institute is conducting a pickup truck/sport utility vehicle project, and FEV is performing a passenger car study. The effects of fuel properties on system performance and unregulated emissions will be investigated, generating comprehensive data on these technologies for the U.S. Environmental Protection Agency's biennial technology assessments. The presentation will provide an overview and current status of the three projects.