National Vehicle and Fuel Emissions Laboratory

The National Vehicle and Fuel Emissions Laboratory (NVFEL) conducts the Federal Government's principal program to control air pollution from motor vehicles. The lab's primary responsibilities include developing national regulatory programs to reduce mobile source related air pollution; evaluating emission control technology; testing vehicles, engines, and fuels; and determining compliance with Federal emissions and fuel economy standards. Organizationally, the lab functions as part of the U.S. Environmental Protection Agency's (EPA) Washington, D.C. headquarters (see chart on reverse side).

The laboratory was established in 1971, shortly after the creation of EPA. It is located in Ann Arbor, Michigan, near the headquarters of domestic automobile manufacturers to facilitate transfer of test vehicles back and forth. Several private sector technology centers are also located nearby, making the Ann Arbor area the world center for research on automotive pollution control.

There are currently 400 Federal and contract employees at NVFEL. Staff expertise spans a variety of technical and public policy fields including auto mechanics, engineering, science, economics, natural resources, and law.

For the first 20 years of operation, NVFEL's goals centered around working with industry to reduce emissions from individual automobiles. The approach achieved considerable success — compared to an uncontrolled passenger car of 1970, an average car on the road today emits 60 to 90 percent less pollution over its lifetime. But the amount of driving in this country doubled during the same 20 years, and the automobile remains the single largest source of air pollution in the United States. More than half the U.S. population lives in areas where pollution levels exceed Federal air quality standards.

The challenge for NVFEL as we approach the next century will be to find ways to reduce vehicle-related pollution while vehicle travel continues to grow. Congress outlined a four-point strategy in the 1990 Clean Air Act to achieve emission reductions from transportation sources. The strategy broadens the lab's activities beyond its original focus on new car emission standards to emphasize:

- **Clean Vehicles** — Cars, buses, trucks, and even nonroad vehicles such as construction equipment and boats.
- **Clean Fuels** — Reformulated gasoline, diesel fuel, and nonpetroleum alternatives.
- **Inspection and Maintenance and Onboard (computerized) Diagnostics** — Programs to identify faulty emission controls and ensure their re-
pair so vehicles remain clean in actual customer use.

**Clean Transportation Alternatives** — Strategies to discourage solo driving and to limit vehicle travel growth.

NVFEL played a key role in developing these strategies and is now actively involved in their implementation.

**NVFEL and the U.S. Environmental Protection Agency**

For More Information:
The Office of Mobile Sources is the national center for research and policy on air pollution from highway and off-highway motor vehicles and equipment. You can write to us at the EPA National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, MI 48105. Our phone number is (313) 668-4333.