

July 14, 2003

The following summarizes Volvo Powertrain Corporation's (Volvo's) progress in implementing the following programs in accordance with the Consent Decree.

### **REQUIREMENTS FOR ON-ROAD HDDEs**

All developmental work on Volvo's October 2002 engines has been completed, and all Volvo engines sold in the United States meet the emissions standards and other requirements of Paragraph 20 of the Consent Decree.

### **COMPLIANCE AUDITING AND IN-USE TESTING**

#### ***In-Use Testing Program:***

In compliance with Section VIII B., the In-Use Testing Program of the Consent Decree, Volvo has implemented a program to ensure that diesel engines manufactured or modified by Volvo meet the requirements of the Consent Decree when driven under conditions which can reasonably be expected to be encountered during normal vehicle operation and use, and also to evaluate the effectiveness of other design changes aimed at reducing emissions. Three of the four phases of the in-use testing program have been completed:

Phase I and Phase II: All work and items required by the Consent Decree for Phases I and II of this program have been completed and approvals received as required.

The Phase III report has been submitted to U.S. EPA and California's Air Resources Board. In addition, Volvo has submitted to EPA the Phase III testing data received from its program contractor, West Virginia University.

Volvo has begun initial stages of vehicle selection for Phase IV testing. The incorporation of EPA-approved electronic control unit parameters in MEMS data acquisition is in process.

### **ADDITIONAL INJUNCTIVE RELIEF**

#### ***Low NOx Rebuild Status:***

In compliance with Section IX, B. of the Consent Decree (Low NOx Rebuild Program), Volvo implemented a program to reduce NOx emissions from Volvo's Model Year 1994 and later MHDDE and HHDDE Pre-Settlement Engines by providing Low NOx rebuild kits for these engines. Since the inception of the program, Volvo reports the following number of rebuild kits have been installed on engines:

- 46 HHD engines
- 3 MHD engines

## Offset Projects

### **1. *Low Emission Natural Gas Project:***

In compliance with Appendix E of the Consent Decree, Volvo is implementing a field test program with low exhaust emission, natural gas-fueled trucks. Six vehicles will be tested, of which so far three are under contract to a customer. Volvo is in the final stage of developing the natural gas engines, which emit very low levels of pollutants.

### **2. *Combined Exhaust Aftertreatment Systems Project:***

In compliance with Appendix E of the Consent Decree, Volvo implemented a field test program with new exhaust aftertreatment on trucks equipped with diesel engines. The aftertreatment includes advanced particulate filters and selective catalytic reduction (SCR) to reduce NOx emissions. Since its inception, the program has been altered to apply to 23 vehicles (originally 30), which will be maintained in the field for longer than originally planned to maximize total emissions reductions from the vehicles. The cost for ultra-low sulfur diesel (ULSD) fuel is higher than originally anticipated. The test fleet has been using ULSD since October 2002. All vehicles will be rebuilt with exhaust filters and SCR by the end of August; shortly thereafter, the urea supply necessary for SCR operation will be activated.