



## **Developing Integrated Emission Strategies for Existing Land-transport (DIESEL) Project**

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### **PROJECT STATUS (OCTOBER 2005)**

The current status of work on DIESEL project includes:

#### **3.1 Laboratory Emission Testing**

DIESEL test sequence was revised in October 2005 to improve repeatability of emission results. Up to this point, five vehicles including light duty vehicles, buses and trucks were tested with this new sequence. The results are satisfied with PCD staff.

#### **3.2 Developing diesel pollution reduction options**

##### **3.2.1 Inspection and Maintenance (I/M) Pilot Program**

PCD with Anti-Air Pollution and Environmental Protection Foundation (AEF) and USAID/AEP arranged preventive maintenance meeting in September 2005. The meeting is conducted to disseminate survey results that AEP interviewed private bus owners, technicians, drivers, and passengers about existing preventive maintenance and possibility of improving it. Participations were interested in the research results and requested information for using as their background.

PCD is arranging preventive maintenance workshop in November 2005 to train around 150 – 200 bus operators and technicians about principal of diesel engine emission and maintenance. Moreover, PCD is inviting car manufacturers such as Hino, Nissan to give presentation on preventive maintenance practices that they recommend during the workshop.

After the workshop, PCD will start in-dept fleet training program by going to five selected fleets that willing to join the program and train their technicians for each specific engines they used. Moreover, trainers will monitor their maintenance practice over six-month period. The evaluation from the program will be both fuel saving and emission reduction. The program will cover the period of November 2005 to August 2006.

##### **3.2.2 Retrofit and Repowering Pilot Program**

PCD with Johnson Matthey (JM) installed five DOCs on BMTA buses, five CRTs on BMTA buses and four DOCs on PCD's light duty diesel vehicles in September 2005. Two weeks after installation, CRTs with the use of low sulfur diesel were removed from BMTA buses since engineer from JM informed that soot was already built up. However, PCD is in the discussion with USEPA to design how to deal with "filter-type system". On the other hand, all vehicles installed with DOCs are currently running on the street and are going to emission laboratory for emission testing. The first emission reduction results will be ready by the end of November 2005.

PCD with Englehard (EH) installed five DOCs on BMA trash trucks and five DOCs on private school buses in October 2005. Vehicles are normally running in Bangkok and are planned to be tested for emission by the end of November 2005.

Dr. Pipon is working on report for second hand engine market in Bangkok. He plan to go to Japan in November 2005 to study about the current situation of engines in Japan. Anyway, His team will contact with private bus association to send buses that will be repowered to emission laboratory both before and after to check emission reduction level from repowering vehicles.

### **3.2.3 Cleaner and Alternative Fuel Pilot Program**

PCD finished emission testing of three BMTA buses using low sulfur fuel (50ppm) in September 2005. PCD is analyzing data before disseminating it in December 2005. Moreover, Dr. Pipon is sending three diesel buses that will be changed to use CNG to emission laboratory in November or December 2005.

### **3.3 Informed Decision-support for Evaluating Alternative Strategies (IDEAS) model**

DIESEL project is continuing contracting AIT students to work on IDEAS model. The details of the contract in this second phase is to develop IDEAS model based on new emission results and cost of implementation as well as ambient condition that available from the project.

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**DIESEL Partners**

