

**Third Party Evaluator's Opinion on  
Metro Manila Air Quality Improvement Sector Development Program**

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**Impact**

The impact of loan to assist the Philippine BOP position was made effective in a timely manner with positive results. The various conditionalities included in the loan agreement paved the way to the passage of the Clean Air Act which included many provisions requiring actions to be taken (as indicated in the report, p. 15). The law also empowered agencies of government to prosecute and fine violators of the law. The enactment of the law also increased the awareness of the general public about the need to reduce air pollution to protect their health. As a continuing effort of GOP, other laws and regulations were enacted such as solid waste management in order to protect the environment. In 2003, GOP ratified the Kyoto protocol.

(a) Reduction of TSP

The 2004 data shows that in most stations the TSP concentration declined except in one station. For the first semester of 2005, there was further declines in concentration, the highest being about 120 ug/nem.

(b) Reduction of NOx

There were few stations that were reported however in four stations they exceeded the Metro Manila average of .01 ppm but all cleared the national guideline of .07 ppm.

(c) Reduction of Lead

Was unable to secure data on lead; with the stoppage in the use of leaded gasoline I presumed that the concentration has gone down more vs 2001 data.

**Sustainability**

**Feasibility of Key AQAP Initiatives**

There are still a number of tasks that have to be accomplished in order to achieve the objectives of the program and to meet the standards of good air quality.

Quality testing of vehicle emissions before registration; vehicular check points for road tests; public awareness and reporting of smoke belching vehicles to authorities; installation of air pollution control devices for industrial and power generating plants, maintenance of AQ monitoring equipment all help attain the desired air quality levels. Of course there are reported systems failures.

According to the Philippine Environment Monitor of 2004, (prepared by the World Bank) there was a decline in the incidence of daily average TSP levels exceeding guidelines by about 14% in 2003 as compared with those recorded in 2000. This decline was attributable to the repeated campaigns of the LTO, LGUs, MMDA, DENR, NGOs and the lowering of the sulfur content of diesel. Additional data showed further improvements.

In the same report, the sales of 4-stroke engines for motorcycles increased dramatically in the first 9 months of 2004. It accounted for 91.5% of the total motorcycle market. Furthermore, the study shows that 75% of the 4-stroke motorcycles were used for tricycles whereas it was only 25% in 2001.

But there are threats to the sustainability of air quality program, such as increasing population and their need for mobility; the lack of power generating capacity possibly in 2008/9 that would necessitate the operation of the two oil fired power stations; weak enforcement of burning solid wastes; weak enforcement by local government units and possibly inadequate budget to sustain the challenge to improve air quality.

Another positive aspect is the initial use of CNG for buses and LPG for taxis. I also hope that the unfinished LRT systems in Manila are completed and some of lines extended to nearby province, such as Cavite to reduce vehicular traffic within Metro Manila.

The growth of new enterprises within Central Metro Manila are in service industries such as call centers, business processing offices, residential units, hotels, hospitals. There are not smoke stack industries but they require electric power for their operations and air-conditioning. Most of the power plants are outside the Metro Manila air shed.

Additional rules for cleaner construction methods should be passed and installation of screens during construction should reduce the suspended particulates.

#### Organization

With reference to the implementing organizations, I was made to understand that the Governing Board has not been fully constituted especially the lack of the NGO representatives. The Board will formulate policy and approve the programs; then the implementing units can draw from the AQMF.