

Mirelle Roccatti, Luisa Molina, Claudia Sheimbaum and José Luis Luege. Photograph: Gabriel Jiménez



Milagro sets new antipollution goal

Federal authorities pursue the implementation of a verification test for pollutant emissions in public transportation.

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Mexico City (February 24, 2006).- According to Jose Luis Luege, Secretary of Environment and Natural Resources, the improvement of air quality in the Valley of Mexico should take less than the 16 years that have been required to overcome the crisis experienced in 1990.

"We must not wait another 16 years to reach levels below the 100 IMECA points", which is the level of toleration recorded as the norm for the protection of the health of the population, he indicated.

Secretary Luege and Luisa Molina, a research scientist, announced the realization of the **Milagro** project during the month of March. He indicated that a system would soon be revealed, in conjunction with the Secretariat of Communications and Transportation of Mexico (SCT), to measure, through a reliable test, the emissions from diesel trucks.

"We strongly support the promotion of the verification test for pollutant emissions in public federal transportation, which we will soon bring to light", he stated.

The study, to be conducted by scientists using six aircraft, nine satellites and three monitoring supersites, will generate information that will be influential in the decision-making policies to improve the air quality in the second most populated city in the world.

Claudia Sheinbaum, Secretary of Environment of the Federal District, explained that during 1990 pollution was breathed in the air 4 hours a day 90 per cent of the days of the year; amounts which have come down to 2 hours during 60 per cent of the days of the year.

Mirelle Rocatti, Secretary of Environment of the State of Mexico, indicated, "with an effort on behalf of society, in less than 16 years the situation may be improved. We can see today that there aren't as many old cars, older than 10 years".

Luisa Molina explained that between the 1st and the 30th of March, 400 scientists from 120 research centers worldwide, in particular from the Space Agency and the Department of Energy of the United States, will analyze the phenomenon of atmospheric pollution in Mexico City.

The goal of the measurement campaign that will cost 25 million dollars, without considering the operation of the satellites, is to provide answers to questions that every megacity on the planet has in regard to pollution as a common urban phenomenon:

How are the pollutants produced; how are they dispersed; how do they migrate to other regions; how do they impact climate change?

Jefrey Gaffney, one of the scientific coordinators of the **Milagro** project, pointed out that the interest displayed by the American research agencies focused on the evaluation of how the global phenomenon of air pollution and climate change are produced.

"In 2003 we found pollutants in Mexico City that had been generated by a fire in Yucatan", indicated Gaffney.

Luisa Molina explained that NASA will study how the pollution from Asia reaches the American continent.

A request to control emissions

Fernando Menéndez, an environmental consultant, proposed that the best possible solution in order to improve air quality was to regulate the sources that have been identified as generating pollution in Mexico City.

Mr. Menéndez, a federal official during the 90s and author of the Hoy No Circula program indicated that "ever since the decade of the 90s from last century, we are aware that the main producers of pollution are the buses, taxis and diesel trucks".

He added that one of the mechanisms to implement some control is the verification of pollutant emissions. "When will we, as Mexicans, be able to make a similar study in the United States?" he questioned.

During the presentation of the **MILAGRO** (Megacity Initiative: Local and Global Research Observations) campaign, Luisa Molina, research scientist of the Massachusetts Institute of Technology, explained the reasons for conducting the study in Mexico City.

"It is a city that is representative of the tropical latitude in which worldwide populations with pollution problems are concentrated; it has a reliable inventory of pollutants since 1985; accessible collaborative and infrastructure facilities, and a team of 80 Mexican scientists that will participate in the campaign", stated Molina.

Luisa Molina and the Nobel Prize in Chemistry, Mario Molina, brought together world-renowned scientists to study the atmosphere of Mexico City.

The megacity's "laboratory"

The resources employed by the MILAGRO campaign in the Valley of Mexico are:

- 5 airplanes will fly each day from Veracruz to Mexico City.
- 1 aircraft from NASA will make its departure from Houston on a daily basis.
- 9 satellites will observe and record pollutants emanating from cars and ground vehicles
- 30 days in March, 24 hours a day, measurements will be conducted, including the 3 ground supersites

Procedure

- During the morning the pollution produced by 3.5 vehicles will be recorded
- In the afternoon, ozone and particle levels will be monitored to see when they are at their highest.
- There will evaluate how pollution transports to Hidalgo, Veracruz, the Gulf of Mexico and the United States.

Source: Luisa Molina, coordinator of MILAGRO / Friday February 24, 2006