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**The Pune, India Experience:
Developing a PM10 Emission Inventory
and Database in Seven Days with Forty People**

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ABSTRACT

A diverse team of 40 participants from several of India's governmental and educational institutions came together within the city of Pune, India, (population approximately 3.5 million) to develop a detailed PM10 emission inventory and emissions database system for the region. Following seven days of intensive, hands-on effort organized and led two emission inventory experts (Gaffney and Benjamin) and EPA staff (Mooney and MacDonald), the project team developed the first-ever emission estimates for the majority of the PM10 emission sources in the Pune region. In addition, a new relational database system was developed that includes automated batch loading, manual entry capability, and data query and reporting functions. The project was sponsored by the U.S. EPA's Office of International Affairs under a Memorandum of Understanding with the Indian Ministry of the Environment and Forests. Support was also provided by the U.S. Agency for International Development and the U.S.-Asia Environmental Partnership (USAID/USAEP). The project website is currently hosted at: <http://www.unipune.ernet.in/dept/env/pei/index.html>

The new PM10 emission estimates for the Pune region, based on locally tailored inputs, emission factors, and methodologies, provide the groundwork for evaluating the sources of air pollution within Pune, and will assist in prioritizing future emissions research efforts. In addition, the database system is sufficiently sophisticated in its overall design and structure to serve as a prototype for statewide and national emission inventories. Combined, these efforts by the dedicated participants and the numerous cooperating agencies provide a crucial foundation for further improving air quality and public health within Pune, and throughout India.

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