<u>USA 5</u>: BenMAP International – Model to Estimate Health Benefits of Air Quality Improvements

In order to…	• Reduce health risks from air pollutants • Address air pollution from transportation and major industrial sources (as well as non-point or area sources)
…one policy option or practical measure that has worked is:	Using health and economic models to identify which emissions sources contribute most to air pollution and then identify effective, least-cost strategies for reducing those emissions.
Case Study Title	**BenMAP International – Model to Estimate Health Benefits of Air Quality Improvements**
3 sentence summary Of Case Study	BenMAP international is a PC-based GIS program that estimates the health benefits associated with air quality changes and the economic value of these benefits. This model is based on USEPA's BenMAP model for domestic applications, which has proven to be a remarkable tool in helping decision-makers understand the health and economic implications of possible air pollution control policies. Since development of BenMAP-international, EPA has participated in a number of training/collaboration initiatives in Asia and Central America, including week-long training sessions for in-country scientific teams followed by application of BenMAP-international to specific case studies within those countries.
Internet Link	http://www.epa.gov/ttnecas1/benmodels.html
Submitted By	U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards
Other information (optional)	• Lead institution: USEPA • Other stakeholders involved: Governments (national and regional), academic institutions, research institutes and private consultants from the nations participating in the training/collaboration sessions. • Key challenges/objectives:(a) introduce health risk assessment and benefits analysis as tools for supporting policy analysis and regulatory development involving ambient air pollution and (b) train national teams in the use of BenMAP-international in supporting risk assessment and benefits analysis as part of regional- and national-scale air quality planning efforts. • Key features of program/initiative: Week-long hands-on training sessions involving BenMAP international. These training sessions are designed to provide participants with a solid introduction to BenMAP-international such that they can begin to use BenMAP in supporting their own policy analyses. In addition, EPA has worked with various nations to support case study applications of BenMAP after completion of the training sessions. • When started/finished: 2004 - ongoing • Results achieved and known impacts: Multiple teams have received BenMAP training in Asia and Central America. Case study analyses in a number of these nations are now underway (although the actual utility of BenMAP outreach efforts in enhancing air pollution planning in the international-context can not be evaluated at the present time since these case studies are ongoing). • Main obstacles faced: Working to insure that BenMAP training is followed up by case study applications of the model that clearly demonstrate its utility in supporting policy analysis in the host countries. This is critical if these training/collaboration initiatives are to result in enhanced policy analysis and regulatory development in the host nations. • Sustainability, scalability and transferability: BenMAP international has been designed as a highly flexible modeling framework that allows analysts to use their own data and model health impacts at a variety of spatial scales ranging from urban/regional to national. • Key lessons learned: Emphasize follow-up after training sessions to support case study applications of the model. • Other relevant websites: http://www.epa.gov/oiamount/index.html