

# **The Conference of New England Governors and Eastern Canadian Premiers**

Report by New Brunswick Lung Association: Workshop on Acid Rain and Mercury

February 11 - 12, 1998

Portland, Maine

June 1998

The discussions on acid rain included a review of the acid rain work to date, the environmental impacts of acid rain, its linkages with fine particulate, along with talks from a variety of presenters on regional solutions and comments on the problem.

In the overview on acid rain, Brian McLean of the EPA said that there is a common perception that acid rain had been solved. Initiatives have been in effect for ten years in both Canada and the U.S.. Unfortunately, the resulting reductions haven't seen changes in lakes and streams. He said that maybe it's too early to see any changes after years of acid rain. There has been a 100% compliance in the programs and the costs have been half of the projections. The reductions started in 1990, with more dramatic changes beginning in 1995.

Nox emissions haven't reduced significantly. Nitrate deposits are staying the same or increasing in some areas. It was suggested that the next steps are to link deposition trends, emission trends and the effects of the program.

Wayne Draper of Environment Canada said that Southeastern Canada is the only area of Canada that has significant transboundary impact. He echoed the comments of McLean, saying that we need to move to a more integrated approach and focus on key source areas.

Rock Ouimet of the Quebec Department of Natural Resources gave a presentation on soil acidification and changes in the forests. The environment is releasing more sulphate than receiving. He indicated the forest is in effect suffering from 'osteoporosis'. What one sees in the forest are the beech trees taking over from the maples. His recommendations were for greater monitoring and critical load maps.

Jeff Brook of Environment Canada commented on the relationship between acid rain and fine particulate. He said it is clear there is a number of different types of coupling of pollutants taking place, but more research is necessary. The mixture of particles and gases has a greater effect than the individual pollutants on health.

In his presentation, Mark Raizenne of Health Canada, also indicated that the interaction between individual pollutants is extremely complex. He said it was important to note that

outdoor pollutants penetrate indoors. The finer the particulate, the longer they stay suspended. Infants, children and the elderly are especially susceptible, with effects such as suppressed lung function. He said that surprisingly lung function changes were not affected as significantly by changes in ozone, but by particulate increases. When put together with all pollutants, he said particulates have the greatest effect.

Brian McLean of the EPA explained that their organization is implementing a new PM2.5 standard. He said Canada is going through a similar process of setting standards. According to him, the sources for particulate are mostly utilities and mobile sources. He concluded that reductions would be seen in 15 - 20 years from now.

In closing, David Coon from the Conservation Council of New Brunswick said that in the past, politicians could use jobs as an excuse against taking environmental actions. Now, it is clear that the environment affects economics and jobs. There are no excuses left not to clean up the environment.