

Air Pollution

NAS REPORT CALLS INDOOR POLLUTION PROBLEM OF 'IMMEDIATE, GREAT CONCERN'

Indoor air pollution is a problem of immediate and great concern that causes illness and premature deaths, according to a report to the Environmental Protection Agency by the National Academy of Sciences.

Rep. Toby Moffett, (D-Conn) chairman of the House Government Operations Subcommittee on Environment, Energy, and Natural Resources, released the summary of the NAS report with a July 24 letter from him to EPA Administrator Anne M. Gorsuch. Moffett's letter complained that EPA is planning to eliminate almost all indoor air pollution research by fiscal 1982.

In urging Gorsuch to study the report - which was released formally by the NAS July 27 - Moffett said, "I believe this serious issue is receiving less than adequate attention by EPA."

The representative requested a "detailed reaction" to the NAS report. An EPA spokesman said the agency has not prepared a response yet.

The report, "Indoor Pollutants," was prepared by a committee of the National Research Council, which is a division of the NAS.

NAS Report

The indoor air pollutants that appear to pose the greatest problems are radon, tobacco smoke, formaldehyde, carbon monoxide, nitrogen dioxide, some airborne microorganisms, and allergens, the report said. For these contaminants, "there is direct and circumstantial evidence that human exposures are large enough and common enough to account for substantial morbidity and premature mortality," according to the study.

However, because of insufficient research on the extent of exposure to these contaminants, it is impossible to estimate the amount of mortality or morbidity, the NAS report said.

Energy conservation that reduces home and office ventilation and the use of new building materials, including those made with formaldehyde, have intensified the problem, according to the report.

Virtually everybody is exposed to indoor tobacco smoke, which is well documented as hazardous, NAS said. Studies have shown increased lung cancer rates among non-smoking women living with smoking husbands, the study indicated. Coughing, headache, nausea, and eye, nose, and throat irritation are among the symptoms from indoor exposure to tobacco smoke, the report stated.

Indoor radon concentrations from soil, groundwater, and construction materials, are 10 times greater than outside concentrations, according to the report. Although techniques for controlling radon in new energy-efficient buildings and homes are available, they have not been demonstrated on a large commercial scale, the report said. (Current Developments, June 5, p. 207).

Report's Recommendations

Population exposure to indoor pollutants should be reduced, according to the report. However, it said, defensible standards for indoor air pollutants could be established for only a few, if any, contaminants in light of the lack of scientific exposure studies. Also, establishing indoor standards "would not necessarily lead to rational or enforceable controls beyond ventilation codes" to dilute pollutant concentrations, the study said.

The NAS report recommended:

- ▶ Assessing population exposures to indoor air pollutants in residential and office buildings and their health effects;
- ▶ Developing monitors and a plan to monitor indoor air pollutants;
- ▶ Determining the effects of reducing air infiltration rates in new homes and buildings, and the effects of construction materials and consumer products on indoor air pollution; and
- ▶ Assessing the effectiveness of various air distribution and cleaning systems on indoor air pollution.

Indoor Air Pollution and NAAQS

The report also stated that excessive indoor air pollution is not a reason to relax national ambient air quality standards for outdoors.

The barriers between indoor and outdoor air are not absolute, and the two may interact chemically and physiologically together, the study said.