United States
Environmental Protection
Agency

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Carpet and Indoor Air Quality

Introduction

The Environmental Protection Agency has developed a comprehensive program to address both sources of indoor air pollution as well as building systems that affect indoor air quality. Carpet is one of the first products which has received significant attention.

EPA recently completed a year long "dialogue" with carpet floor covering industries, unions, public interest groups and other Federal agencies to explore ways of reducing the emission of volatile organic compounds (VOCs) from new carpet and related installation materials, such as carpet cushion and adhesives. The Dialogue was initiated as a pollution prevention program following complaints that carpet was causing health problems for some individuals even though an evaluation of available data failed to establish a cause and effect relationship between carpet emissions and reported symptoms. As a result of this voluntary process, the carpet industry agreed to test new carpet floor covering materials for total VOC emissions and is exploring ways of lowering emission of VOCs from carpet products.

Evaluation of New Information

While no scientific link between the levels of chemicals emitted by carpet and adverse health effects has been established to date, a recent preliminary study by Anderson Labs found that mice exposed to emissions from complaint carpets showed severe health problems and in some cases died.

In keeping with EPA's commitment to evaluate new information as it becomes available, EPA is in the process of attempting to replicate the results of the testing conducted by Anderson Labs. At this time, nothing is known about the nature and concentration(s) of possible causative agents to which the mice were exposed. We also do not know the extent to which the design of the experiment and the way in which the study was run contributed to the effects observed with the problem carpets. Determining which factors may have contributed to the severe effects noted in the exposed mice will allow for an assessment of the hazard potential of emissions from these problem carpets under defined conditions. Therefore, in addition to replicating Dr. Anderson's test results, EPA will conduct additional tests to identify the contaminants the mice are exposed to and evaluate the observed biological effects. EPA will also evaluate the different test parameters. This information will aid in the assessment of the potential risk posed by carpet. Testing to address these issues will begin in November 1992.

Tips for Consumers

When installing new carpet, the following precautions are suggested:

- Talk to your carpet retailer. Ask for information on emissions from carpet.

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- Ask the retailer to unroll and air out the carpet in a well-ventilated area before installation.

- Ask for low-emitting adhesives if adhesives are needed.

- Consider leaving the premises during and immediately after carpet installation. You may wish to schedule the installation when most family members or office workers are out.

- Be sure the retailer requires the installer to follow The Carpet and Rug Institute's installation guidelines.

- Open door and windows. Increasing the amount of fresh air in the home will reduce exposure to most chemicals released from carpet. During and after installation, use window fans and room air conditioners to exhaust fumes to the outdoors. If you have a ventilation system, be sure it is in proper working order. Operate it during installation, and keep it running for 48 to 72 hours after the new carpet is installed.

- Contact your carpet retailer if objectionable odors persist.

- Follow the manufacturer's instructions for proper carpet maintenance.

For Further Information

To obtain a copy of the Carpet Policy Dialogue brochure "Indoor Air Quality and New Carpet – What You Should Know", write to Consumer Information Center, Dept. 620-Y, Pueblo, CO 81009

For more information on indoor air pollution, call IAQ INFO at 1(800) 438-4318.