

Rachel's Environment & Health News

#49 - California Report Describes The Problem Of Indoor Air Pollution, Gives New Sources Of Information November 01, 1987

Indoor air pollution is a much more serious problem than outdoor air pollution. Even when indoor pollution levels are lower than outdoor levels, exposures can be significant because people spend so much time indoors; average Americans spend more than 90% of their time indoors.

Indoor pollution levels usually exceed outdoor levels because building materials and consumer products exude chemicals into the air, and because air gets trapped inside buildings. The average American home now uses 45 different products packaged as aerosol sprays. Increasingly, people cook their food and heat their homes with unvented stoves and kerosene heaters. Carpeting, wallboard, paint, and spackling compounds all give off toxic fumes.

Showering, bathing, washing dishes, washing clothes, and flushing toilets can release water pollutants into the air indoors. Air exposure from water-borne chemicals is much greater than from drinking contaminated water. Your lungs are designed to transfer chemicals efficiently between the air and your blood stream. Because of the complex structure of the inner surface of the lungs, they present a very large surface to the atmosphere (an area as large as two tennis courts).

Indoor levels of formaldehyde, radon, asbestos, mercury, and a variety of organic chemicals have been measured in homes at levels exceeding federal standards.

Solutions to these problems require less use of toxics in home products and other changes.

People wanting more information on these subjects should write Dr. Stanley V. Dawson, Research Division, California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812 requesting a copy of INDOOR AIR QUALITY AND PERSONAL EXPOSURE, BRIEFING PAPER dated May, 1987. In addition to an intelligent overview of the problem, this free 70-page report contains an 8-page bibliography for further reading.

--Peter Montague

=====

REPORT DESCRIBES WIDE RANGE OF NEW TECHNOLOGIES FOR DISPOSING OF HAZARDOUS CHEMICAL WASTES

Pollution fights often follow predictable steps:

- 1) A polluter sets up shop, establishes a going concern, creates jobs, and starts making money. Years pass.
- 2) The community begins to suspect that something is wrong. A cluster of leukemias appear, or the water begins to smell bad, or a group of children faint in school. Local people begin to wonder what's happening to them.
- 3) The regulatory agencies (local health department, state environmental department and U.S. EPA) deny that any problem exists. They refuse to monitor. In the newspapers, they say local people are "misinformed," or "misguided" or troublemakers.
- 4) The "troublemakers" gain sophistication. They read; they talk late into the night; they make a million phone calls. They gather evidence that the agencies should be gathering. They learn to use the media. They contact experts and they begin to develop expertise themselves. They begin to realize that they are capable and powerful.
- 5) Local people push the issue and public hearings are held. At the public hearings, industry (or, more often, their spokespeople in government) try to turn the tables and put the burden of proof on the victims, asking local people "What alternatives can you suggest?"

Now of course it is not up to the citizenry to re-design America's industrial apparatus. Nevertheless, in such a situation, citizens can often move things forward by suggesting alternatives for industry (and their spokespeople in government) to consider.

Until recently, there was no single source for information on alternative technologies for chemical disposal. Now the Citizen's Clearinghouse for Hazardous Waste (CCHW) in Arlington, VA, has published ADVANCED TREATMENT TECHNOLOGIES FOR DISPOSAL OF HAZARDOUS WASTES, 82 pages of information about existing technologies that can destroy (or, in some cases, prevent) chemical wastes.

This report (first issued in August, 1986, but revised in September, 1987) is mostly aimed at people working on Superfund sites. The government's response at most Superfund dumps has been to put a clay cap over the site and perhaps a "grout curtain" or "slurry wall" underground at the site. These are called "containment" methods. Caps and walls will slow the migration of chemicals from a dump, but they are a superficial, temporary non-solution to a serious, long-term problem. Containment methods have only one real advantage: they slow the advance of the problem until another generation of politicians has taken office, thus getting today's officials off the hook.

Anyone looking for real solutions at Superfund sites will want to read this new CCHW report. It describes 55 different technologies that might be applied to a cleanup situation, depending on the nature of the local problem. But perhaps more importantly, it contains a list of questions you should ask yourself about any new technology (pg. 4), a sensible discussion of ways citizens can promote consideration of new technologies (pgs. 37-52) and a description of EPA's program for evaluating new technologies, called the SITE [Superfund Innovative Technology Evaluation] program (pgs. 40-45). SITE is formally evaluating 10 new technologies for cleanup.

CCHW has held two roundtables on advanced technologies. Without endorsing anyone's products, they bring in citizen leaders to hear presentations by companies selling advanced technologies. The citizens come away from the meetings impressed by the broad range of technologies available today for waste cleanup, and of course the companies benefit because citizens start advocating consideration of new technologies at sites around the country. The companies pay for the privilege of presenting their wares to assembled citizens, so this kind of roundtable could be a money maker for your group.

ADVANCED TREATMENT TECHNOLOGIES FOR DISPOSAL OF HAZARDOUS WASTES is \$8.95 from CCHW, P.O. Box 926, Arlington, VA 22216. Phone (703) 276-7070. The EPA's SITE program is described in a December, 1986, booklet called SUPERFUND INNOVATIVE TECHNOLOGY EVALUATION (SITE) STRATEGY AND PROGRAM PLAN [EPA/540/G-86/001; OSWER 9380.2-3] published by the Office of Research and Development, Office of Solid Waste and Emergency Response, U.S. EPA, 401 M Street, SW, Washington, DC 20460; phone the Superfund hotline to request your copy: (800) 424-9346.

--Peter Montague

=====

Descriptor terms: citizen groups; alternative treatment technologies; superfund innovative technology evaluation; superfund; remedial action; waste treatment technologies; waste disposal technologies; indoor air pollution; ca; formaldehyde; radon; asbestos; mercury; organic chemicals; carb;