

Rachel's Environment & Health News

#33 - Waste Reduction Or Reduction In Our Use Of Toxics -- Two Goals Now Being Sought By Different July 12, 1987

Everyone now knows that everything must go somewhere (including all the raw materials we mine from the ground and send to our factories). We turn raw materials into "useful products" for a while, but then we discard them. If our useful products are made of dangerous chemicals, the workers who handle those chemicals are endangered, the people who purchase the products may be exposed to hazards, and sooner or later some duck or trout is polluted. Ultimately, the whole planet is, or will be, threatened.

If American industry used fewer dangerous chemicals, everyone would benefit. The companies themselves would face fewer liability suits, fewer angry citizens shaking their fists, and fewer government bureaucrats snooping around. Factory workers would be exposed to fewer hazards on the job. Communities would have less to fear from Bhopal-type accidents and from routine releases into the local air and water. People concerned about the general environment, the ocean, the atmosphere, and the ability of Earth to support wildlife, could also rest easier.

We seem to find ourselves in a twilight zone where everyone recognizes the simple truths outlined above, yet almost no one acts on them and most "responsible" people aren't even willing to mention these ideas in public.

For example, the leading authority within the U.S. government on waste reduction is the Congress's Office of Technology Assessment (OTA); the main environmental group studying waste reduction is INFORM, Inc. Neither of these groups advocates a general reduction of the use of dangerous chemicals by industry. They both advocate reduced wasting of dangerous chemicals. Their message in their recent publications is clear and explicit: they say America's goal should be waste reduction at the manufacturing site. This is a worthy goal, so far as it goes, but it fails to touch the heart of the problem, which is not hazardous wastes at the point of manufacture but hazardous chemicals in products that endanger workers and that are eventually released into the environment where they pollute water and air and people across the planet.

The best-known environmental thinkers in this field are the staff of INFORM, a New York research group. In 1985, INFORM published a book-length study, **CUTTING CHEMICAL WASTES**. Now they are circulating a draft policy statement called **PROMOTING HAZARDOUS WASTE REDUCTION: SIX STEPS STATES CAN TAKE**. (Both are available from INFORM, 381 Park Ave. South, NY, NY 10016; phone (212) 689-4040.)

In **CUTTING CHEMICAL WASTES**, a study of 29 organic chemical plants, INFORM offers as a worthy example the Ciba-Geigy Plant in Toms River, NJ. After polluting an enormous area around the plant, Ciba installed a new dye-making process allowing the reduction of chromium wastes by 25%. Ciba achieved this "more efficient" use of chromium by redesigning its process to use a "solvent" instead of water. INFORM researchers did not identify the solvent, did not evaluate possible hazards created by the solvent, and did not ask the fundamental question, where does all the chromium go? It is laudable that 25% less chromium ends up as wastes in Toms River, but the more important question is, how much total chromium reaches the earth's surface environment as a result of Ciba's dye-making? Irving Sax's **DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS**, a standard reference book on toxicology, says that chromium salts are a human carcinogen of the lung, the nasal cavity, and the paranasal sinus; in animals, chromium can cause cancer of the stomach and larynx. Is Ciba Geigy's chromium put into consumer products, sold, used for a time, then dumped into municipal landfills across America where it pollutes peoples' drinking water? This is the important question--not the reduction of "wastes" at the Toms River Plant.

Another example that INFORM lauds is a decision by USS Chemicals to upgrade the quality of two million pounds of diphenylamine (DPA) waste (annually) so that "now, instead of being burned as waste, as was originally planned, DPA is sold as a

product," INFORM reports approvingly. INFORM does not identify DPA as a hazardous chemical but Irving Sax flags DPA as a cause of birth defects and cancer in laboratory animals. Furthermore it is a hazard to the community in which it is stored because when heated (as in a fire) it emits "highly toxic fumes," Sax says. It may be laudable not to "waste" DPA, but the more important questions are: is DPA being shipped to customers all across America where it then can harm workers and consumers and community residents? And shouldn't DPA be phased out in favor of less dangerous alternatives? These questions INFORM does not ask.

The Congressional Office of Technology Assessment (OTA) suffers from the same syndrome: their thinking is restricted to solving the problem of manufacturing wastes, instead of trying to reduce problems of hazardous chemicals wherever they may show up. OTA has published two excellent studies of waste reduction. The first is **SERIOUS REDUCTION OF HAZARDOUS WASTE: FOR POLLUTION PREVENTION AND INDUSTRIAL EFFICIENCY**, published in September, 1986, by the U.S. Government Printing Office (USGPO; document No. 052-003-01048-8; \$12.00) and their brand new one, **FROM POLLUTION TO PREVENTION; A PROGRESS REPORT ON WASTE REDUCTION**, also available from USGPO (\$2.75; document No. 052-003-01071-2). Order them both by phone from USGPO: (202) 783-3238 and pay by Visa, Choice, or Mastercard.

The new OTA report reveals that the agency with real clout in these matters, the U.S. Environmental Protection Agency (EPA), has not begun to think about these problems except in a thoroughly muddled way.

But even the OTA itself, which does think straight, gives 54 pages of facts and arguments promoting waste reduction, but only a single sentence to the idea that "toxics use reduction," not waste reduction, could be our national goal. "Toxics use reduction is rapidly becoming a broadly supported concept," says OTA (p. 49) but OTA does not then recommend it to Congress for policy consideration; OTA recommends only waste reduction.

By OTA's thinking and by INFORM's thinking, if we could just make hazardous products without making any hazardous wastes at the manufacturing site, we could stop thinking about these problems. Obviously this is nonsense. Where do hazardous products go? They affect workers, then go into our homes, where they cause indoor air pollution (a more serious problem than is yet generally recognized), then they go into landfills where they contribute to water pollution (and even air pollution). Many local governments are now trying to set up municipal incinerators to turn discarded consumer products into new forms of air pollution and toxic ash at great public expense. Does this make sense?

It seems that the only people seriously addressing the fundamental problems of toxics are members of the grass roots environmental movement. For example, Sanford Lewis at the National Campaign Against Toxic Hazards, Box 522, Bedford, MA 01730 can send you model legislation on "toxics use reduction" that the Campaign is advocating in several states. Phone them at (617) 482-1477.

--Peter Montague

=====

Descriptor terms: toxics use reduction; inform, inc; waste reduction; waste minimization; pollution prevention; ota; nj; ciba-geigy; chromium; carcinogens; cancer; drinking water;