Toxic Waste R&D Effort Stalled

When Congress passed the latest version of the Superfund law in 1986, it established a basic research program to study the effects of hazardous wastes on human health and to explore better ways to contain and destroy these wastes. But almost 2 years after the enactment of the legislation, the research program is struggling to move forward because only a fraction of federal trust funds designated for this work have been released.

The legislation called for ramping the program up from $3 million in 1987 to $35 million by 1991. The money to pay for this work comes from a multibillion dollar trust, the so-called "Superfund," which is financed by fees paid by chemical and petroleum companies. But last-minute reductions imposed by appropriations committees for fiscal year 1988 and Administration opposition to full funding for next year have stalled the program.

"It's less than 1% of the Superfund program," says Martyn T. Smith, who heads one of the few research efforts that have received funding. "Can we really afford not to do this research," says Martyn, noting that the nation risks wasting millions of dollars on cleanups that may turn out to have been unnecessarily costly or ineffective.

That is exactly what is happening right now, says Joel S. Hirschhorn, an analyst at the Office of Technology Assessment (OTA), a research arm of Congress. While many of the cleanup problems are a result of bad management, he says additional research on the risks of toxic wastes and on containment and treatment technologies is needed.

Only four research grants have been issued—all of them in 1987. The research, which is being conducted at the Berkeley and Davis campuses of the University of California, the University of Washington, and the Massachusetts Institute of Technology, has focused on a range of biomedical issues. These include developing a more precise assessment of subtle as well as pronounced effects of toxic substances; characterizing how chemical compounds trigger genetic mutations and the threshold levels at which this occurs; and understanding how organic compounds and other wastes at uncontrolled waste sites are transported.

The National Institute of Environmental Health Sciences (NIEHS), which administers the research program for the Environmental Protection Agency (EPA), had hoped to expand its research effort by making more grant awards—ones that would link biomedical research efforts with engineering R&D to produce more effective strategies for controlling and disposing of hazardous wastes. The agency received 33 applications in response to its solicitation, but no new grants will be made in 1988 because Congress did not appropriate an additional $10 million, as had been anticipated.

Most of the $5.9 million that is available will go to maintain the ongoing research efforts. And the outlook may not be much better in 1989. The Reagan Administration wants to freeze the hazardous-waste research program's budget at the 1988 level, rather than hike it to $20 million, as stipulated in the law.

Roy E. Albert, chairman of the Department of Environmental Health at the University of Cincinnati Medical Center, says the program has been slighted because EPA favors spending on regulatory activities rather than basic research. Albert, who formerly headed EPA's health and ecology research program, and officials from other universities that have submitted requests for funding are pressing the appropriations committee to increase funding, as called for under the law.

Representative Edward P. Boland (D–MA), chairman of the House appropriations subcommittee that oversees EPA, is sympathetic to the researchers' pleas. But it is uncertain whether the subcommittee will add funds to the research program. Although funded from the Superfund trust rather than from general revenues, the expenditure is still counted as part of EPA's budget, which is subject to deficit-control spending limits adopted by Congress. ■

MARK CRAWFORD

OECD Sets Guidelines for Cooperation

Paris

In a pitch for open scientific communication, prompted largely by the U.S. Office of Science and Technology Policy, the governing council of the Paris-based Organization for Economic Cooperation and Development has told the organization's 24 member states to take steps to remove "barriers considered to have harmful effects on scientific and technological progress."

In particular, OECD members have been urged to ensure that all important research results are published in "internationally available scientific literature," to support open participation in scientific meetings, and to facilitate the access of scientists and engineers to major basic research facilities.

William Graham. *His proposals were initially viewed as aimed at Japan.*

The statement, a two-page "general framework of principles" covering international cooperation in science and technology, deals largely with basic research. The OECD council essentially ducks the thorny issue of controls on scientific information likely to have commerical or military applications by simply noting that different circumstances and policies of member countries "may affect the openness of international exchanges."

OSTP director William Graham argued strongly at a meeting of OECD research ministers last fall that such an agreed framework would be a useful way of codifying basic assumptions about the "rules of the game" that should cover international scientific agreements (*Science*, 6 November 1987, p. 743).

Despite some initial skepticism from other delegates during the meeting itself, OECD officials say they were surprised by the positive response from national capitals to their preliminary proposals, as well as by the speed with which a consensus was reached, both on the general principles to be included in the guidelines and on the precise wording used to express them. "By OECD standards, the whole process seems to have moved at .98 the speed of light," says Robert Carr, science attaché to the U.S. delegation to OECD.

Graham's original proposals were widely seen last fall as an attempt to obtain international endorsement for U.S. efforts to persuade the Japanese government to increase