The last such environmental impact statement was completed by NIH in 1977 and examined the first Guidelines issued in 1976. Rifkin believes that the original environmental impact statement is sadly out of date. "When they did the original impact statement they'd never heard of the word AIDS," says Rifkin. "We think it's time to stop and reevaluate what has happened during the past 10 years." Rifkin insists that "it is not enough for a bunch of scientists to tell us everything is okay. By law, the process has to be a public one."

The law Rifkin refers to is the 1982 National Environmental Policy Act, which requires a federal agency to prepare a supplemental environmental impact statement

when "there are significant new circumstances or information relevant to environmental concerns..." Says Rifkin: "You can't tell me that somebody from NIH is going to stand up in court and tell the judge that there haven't been significant changes in the last 10 years."

Someone might. Robert Lanman, NIH's legal adviser, says that his office is working on a response to Rifkin's suit. Gartland says that although NIH has not done an environmental impact statement since 1977, the agency has produced about a half dozen "environmental assessments," a much less formal process that does not involve lengthy public comment.

Rifkin has successfully used the National

Environmental Policy Act before. In 1986, he sued the Department of Defense, which is currently in the throes of preparing an environmental impact statement covering research at all government and contract laboratories doing work for the Biological Warfare Defense Program, which is studying such deadly subjects as vellow fever, anthrax, and botulism. As part of the settlement, Rifkin gave up his request that the research be enjoined; the military agreed to do the environmental impact statement. Rifkin and his attorneys seem prepared to discuss a similar deal with NIH. Whether officials at NIH want to listen is another matter, though it would be an interesting conversation.

WILLIAM BOOTH

Fat Survey Trimmed in Lean Budget

Body fat provides a biological record brimming with information about people's exposure to chemicals. So for more than two decades, the Environmental Protection Agency (EPA) has tested fat tissue from people across the nation to track the fate of toxic substances. The findings from these surveys have flagged potential public health problems, prompted the agency to ban or restrict the use of certain hazardous chemicals, including DDT, dioxin, and PCBs, and indicated whether tighter regulations are indeed working.

But EPA, whose budget has become ever leaner under the Reagan Administration, is proposing to trim away the \$1.2-million monitoring program, known as the National Human Adipose Tissue Survey. Advocates of the survey assert that without the program, health officials and policy-makers will be significantly handicapped in regulating toxic chemicals.

EPA is currently apportioning money appropriated by Congress for fiscal year 1988 and plans to phase the fat survey to keep within its funds. The agency is on the verge of approving its final budget. The program's proponents are hoping that at this late date Congress will appropriate new money to bail it out and give it permanent authorization.

Martin Halper, director of the exposure evaluation division in the office of toxic substances, supports the survey but says that budgetary constraints have forced him to eliminate it together with other programs not mandated by Congress. In 1981, the annual budget for the exposure division was \$41 million, but since then it has been steadily cut. This year, the division's budget is \$17 million. "The Adipose Tissue Survey was the only single nonmandated program that was left," Halper says. "There wasn't much choice but to cut it because there was no money. It's hard to get blood from stone."

There is no other comparable program in the public or private sector to monitor human exposure to toxic chemicals, EPA officials and others outside the agency say. In the program, a network of pathologists and medical examiners across the country collect fat tissue in a statistically designed survey from individuals who died in accidents and who have undergone elective surgery. The samples are then analyzed by gas chromatography and mass spectrometry, which provides precise fingerprints of chemicals accumulating in humans. About 10,000 tissue specimens—some dating back to the early

1970s—are archived in Kansas City for research, and the mass spectral information is stored on tape at the National Bureau of Standards.

Richard Thomas, director of the National Academy of Sciences' committee on toxicology, says that the fat tissue survey "is an important program because it gives a way to judge whether levels of toxic substances are increasing or decreasing in humans and, in the end, whether regulations are having an effect, especially with chemicals such as dioxin." Morton Lippmann, chairman of the EPA science advisory board subcommittee on indoor air quality and professor at New York University, says, "Early detection is important for these chemicals." The survey "is an extremely valuable resource."

Ellen Silbergeld of the Environmental Defense Fund and others argue that the survey findings also help to determine which chemicals are potential problems. Tens of thousands of chemicals in commerce are still untested for their potential health hazards, according to a 1984 report by the National Academy of Sciences. The EPA survey "is a good way to prioritize" worrisome chemicals, Silbergeld says.

Thomas and others say that the survey findings also provide direct information about human exposure to toxic chemicals and, by doing so, help to validate experimental models used by researchers to predict exposure and health risks to people.

The survey results were instrumental in spurring EPA to regulate PCBs, says Joseph Breen, program manager of the survey. In the early 1970s, 85% of the American population had detectable levels of PCBs or polycholorinated biphenyls in their bodies, according to EPA estimates based on the survey. By the mid-1970s, the percentage shot up to 100%, spurring the agency to impose strict regulations on the toxic chemical. By 1983, the survey showed that fewer people, especially children, had detectable levels, which was strong evidence that the PCB rules were working.

EPA's fiscal 1988 budget has enough money to keep the refrigerators in Kansas City with the tissue samples plugged in and the tapes maintained at the National Bureau of Standards, but no money for additional surveying and chemical analyses. Halper of EPA says, "This is the kind of program that needs guaranteed funding. As a discretionary program, it will always be vulnerable to cuts."

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