with whom she deals at NIH, but she believes that her lack of an academic background in science is an asset to doing her job. Many officials at NIH would, of course, prefer to see a scientist in her position, but most of them are realistic enough to know that is not going to happen.

Stone is involved in the budget process from the very beginning of its yearly cycle, and as she goes from institute to institute to review its programs, she asks a lot of questions that make people uncomfortable. (O'Neill says that OMB is asking questions today that are a lot tougher than the ones it asked in 1967, when he first worked in the budget office; NIH scientists agree.)

As Ann Stone makes her rounds, she asks for a description of institute programs, demanding a definition of what they are and where they are supposed to be going. She asks institute officials how they measure progress. She asks what the alternatives to any given program are and, as part of that, suggests that scientists start asking whether the federal government should be supporting certain programs at all.

The latter question has become something of a refrain for this Administration. It was the question OMB asked when it decided to phase out NIH training grants. Scientists defended the program that supported young biologists, but OMB decided that there was no reason taxpayers should pick up the bill for individuals who will go on to earn good incomes, especially since they believe the nation is not facing a shortage of biomedical researchers. When the Administration was subsequently persuaded to relent a little and restore some of the training money, OMB was there to make sure NIH executed the "new" training program in accordance with policy. The Administration had decided that training money should go only to persons working in areas in which there is a shortage of researchers, and NIH was instructed to determine which ones they are.

Instead of trusting NIH to do that job, OMB stepped in and asked a slew of detailed questions about what the areas of shortage are and how anybody had determined that and what scientific accomplishments might be anticipated by training persons in one field rather than another. The questions offended many NIH scientists who believe that no one at OMB knows enough to evaluate such scientific judgments. Officials at OMB say that the people at NIH have it all wrong. It was never their intention to ask NIH to make substantive changes as far as its scientific assessment goes. Rather, OMB asked those questions to force the scientists to think about what they were doing, to force them to consider alternatives and to set goals. The OMB intends to keep asking such questions until everybody learns.

Although Stone's questions are offensive, at times, to scientists who are put off by her cross-examination, what galls them more is their conviction that she and her immediate supervisor,

Briefing

Adamantly Vague on Chemicals and Health

What probably will be the last report to emanate from the now-defunct President's Science Advisory Committee (PSAC) was released on 9 January after 3½ years of preparation at an estimated cost of $60,000. Titled *Chemicals & Health*, the report is the work of a PSAC panel bearing that name. John W. Tukey, who is a professor of statistics at Princeton University, was chairman of the panel, which included scientists and administrators from the chemical industry, universities, and government.

The panel was convened in 1970, at a time when new toxic substances in food additives and agricultural chemicals seemed to be cropping up every week and when the chemical industry was moaning that hasty regulation, or overregulation, by the government could hurt business. Science adviser Lee A. DuBridge decided PSAC should come up with some advice on how much safety government regulators should strive for, where more research is needed, and what organizational arrangements are most desirable. Panel members would be after DuBridge's successor, Edward E. David, Jr., took office.

The resulting report appears to be a compendium of the usual formulas that science advisory committees are always coming up with: eloquent arguments in favor of new knowledge, calls for increased funding of research, requests for further study of bureaucratic problems, and so forth. In addition, the report frequently laments the hasty, often partially informed manner in which government regulators decide what substances to ban. To counter this, the report urges more layers of bureaucracy, procedures more adaptable to changing knowledge, and, of course, more research.

However, some officials who have been utilizing the report in a nearly identical, draft form that has circulated within the government for about a year, say differently. They think that some of the substantive chapters—on food additives, on household products, and on the economics of the relevant industries—have been helpful to those in the government who deal with regulation of chemicals. The report reaches a commonsensical general conclusion, that government regulators should pay more attention to hazards that affect the largest number of people—smoking, alcohol, poor diet—and spend relatively less time reacting to "vivid accounts of nonexistent or very minor threats to health." Finally, tucked away in the "Major Issues" section is the suggestion that the government try a little technological forecasting. A "small, but highly capable, analytically oriented group," should be established which would examine trends in the relevant chemical industries and match them against priorities in health effects research. For the cognoscenti, then, in the Department of Agriculture, the Food and Drug Administration, and the Environmental Protection Agency, who grapple with these problems daily, the report offers some interesting advice.

However, the citizen or congressman—who wants to know whether Congress should pass a toxic substances control act (which it has deliberated for years), or whether it should weaken the Delaney Amendment, which in effect prohibits carcinogens in food, or, finally, whether it should alter the sketchy and controversial numerical standards in the auto emissions section of the 1970 Clean Air Act—will not find the answers here. *Chemicals & Health* discusses these controversial matters only in the most general, neutral terms, and members of the panel, at a press conference to release the report, remained adamantly vague in response to questions on these topics.—D.S.