congressional staff aides that any release of the data would indeed be delayed until Congress had time to modify the law in line with the desires of the industry.

Subsequently, the Natural Resources Defense Council (NRDC) sued EPA on behalf of all of the environmental groups, alleging that the agency was deliberately not complying with the 1978 law. In June, on the day that a judge was to order Todhunter's deposition, the agency declared that it was not holding things up and mailed out a formal denial of Weinstein's request for protection.

Congress, meanwhile, has been scrambling to respond to the manufacturers' demand for stricter limitations on access to the health and safety data. Last week, for example, the House of Representatives was scheduled to vote on a bill that would require anyone viewing such data to agree to stricter and more elaborate EPA regulations regarding data copying, transfer, storage, publication, and submission to a court. If the data involve what the legislation describes as

"innovative [scientific] methods and technologies," they could be viewed only by scientists employed in government or with nonprofit health, environmental, or labor organizations, who would have to comply with EPA rules for use of the data and communication with one another.

The industry claims that these provisions will not unduly inhibit public review of the studies. Weinstein says that much of the data could be described or quoted in a review article; "you just couldn't reproduce a verbatim copy and send it to another manufacturer." But the provisions on innovative methods seem more tricky. Means of detecting pesticide residues and metabolites, and therefore human exposure, could be covered by the definition. Farmworkers and journalists would be denied access to those studies, and any review would occur among a select group of scientists. Publication would be sharply constrained. Todhunter, in recent testimony before a Senate subcommittee, maintained that adequate independent review could still be accomplished. "The most important mechanism in this regard is for scientists to go and talk to each other," he said. "Information in a peer reviewed journal is mostly outdated by the date of publication."

In contrast, much of the environmental community believes that the provisions could prevent an adequate review. Ralph Lightstone, an attorney for the migrant farmworkers project of California Rural Legal Assistance, is concerned that the industry will ultimately contest the regulations EPA develops to implement the law, thereby delaying disclosure for years longer. Jacqueline Warren, an attorney with the Environmental Defense Fund, believes that open circulation of test methodologies is critical to obtaining adequate scientific review. A group of 51 environmental scientists from state governments, academia, and consulting firms recently wrote to Congress that much pesticide research could be classified as innovative, and that free and full review could thus be prevented under the provisions of the House bill. Despite such objections, however, similar legislation has been introduced in the Senate, where the industry's view is also expected to prevail.

"The big question is: are we going to get the current law implemented before it is erased from the books?" asks Al Meyerhoff, an attorney with NRDC. Weinstein feels confident of an industry victory. Lawrie Mott, a scientist for NRDC, notes that the environmentalists still have a long way to go before they can make use of what they learned through access to the data in June. They had only 4 days to sift through a mountain of material; nothing except study titles could be recorded; and those present were barred from discussing what they saw with anyone else. The environmentalists agreed to such awkward conditions because they hoped that a quick review of the data would permit them to shorten the request for their own complete copies, hastening EPA's compliance. Whether or not that will actually happen seems highly problematic, as the industry has a role to play in reviewing what EPA decides to give up.

Mott is pleased to have had even a short look. "It was the first time we had seen unpurged chemical company data," she says. But whether she and the others can ever freely tell the public what they saw appears to be firmly under the industry's control. At the least, it seems likely that future debates about pesticide safety will continue to center around studies that the public has never seen.

-R. Jeffrey Smith

Tokyo's Edge Over Detroit

Despite the popular conception that Japanese automakers have captured a large slice of the U.S. market because of superior technology, the real reason for their success lies in better management, according to a study published on 26 July by the National Academy of Engineering.* As a result, the study concludes, if the U.S. industry is ever going to recover its competitive position, it must change the way it does business. In particular, it must start bringing workers into decision-making and create an environment where innovation is encouraged. All of this, the report concedes, amounts to "something close to a cultural revolution."

The report, written by a committee chaired by Harvard Business School professor William Abernathy, runs through most of the standard diagnoses of the ills afflicting Detroit but keeps coming back to a central theme. Japanese companies, it says, have been able to change and innovate more rapidly and have managed to maintain a system of excellent quality control. In comparison, the American industry tends to be more rigid, labor-management relations are more hierarchical and adversarial, and there has been less scope for innovation.

The emergence of so-called "quality of worklife" experiments in some U.S. auto plants is a step in the right direction, the report suggests, and the committee perceives "reason for optimism" in the willingness of labor and management to discuss productivity and quality control in collective bargaining. But it warns that the magnitude of the required changes must not be underestimated.

As for technology, the study suggests that the industry "may be at the beginning of a period of intense, technology-based competition." But it questions whether U.S. companies, in which "for the most part the research organizations... have not been tied to the basic competitive activities of the business" are yet up to the task. In essence, the report is suggesting that the answer to the U.S. industry's ills can be found in Detroit rather than in Washington.—COLIN NORMAN

*The Competitive Status of the U.S. Auto Industry (National Academy of Sciences, Washington, D.C., 1982). \$13.50.