forbidden under government rules, according to investigators, and there was no supporting documentation for some of the transactions. The lab's motivation, says one investigator, was to make it appear that all was running smoothly at the billion-dollara-year lab.

"Public institutions such as [Livermore] must maintain strict care and accountability of public funds since they have a public trust

and responsibility to do so," says U.S. Attorney Michael Yamaguchi. Under the terms of the settlement, which was announced last week by the Justice Department, the lab denies allegations that the government was damaged by the actions but agrees to pay \$2.7 million, which includes a \$1.2 million fine. In return, the government agreed to waive any further action.

Livermore officials released a statement

saying that "no laboratory employee realized personal gain from the transactions." University of California spokesperson David Schwoegler said that "we've admitted impropriety," but he denied that the federal government suffered as a result. He said the actions of Livermore officials were "well-intentioned but inappropriate. They shouldn't have done it."

-Andrew Lawler

INTELLECTUAL PROPERTY_

Treaty Draft Raises Scientific Hackles

Electronic databases are essential working tools these days for astronomers, meteorologists, medical researchers, and most other scientists. That is why a move to strengthen the rights of companies to restrict access to databases they compile has touched a raw nerve among science officials in Washington. Indeed, feelings are running so high that the presidents of the National Academy of Sciences (NAS), the National Academy of Engineering (NAE), and the Institute of Medicine (IOM) are warning that a proposal to be discussed at upcoming international trade talks in Geneva could make it harder and more expensive for scientists to gain access to data. And they are asking the U.S. government to make sure that doesn't happen.

The issue pits the rights of scientists in the age of cyberspace against companies that want to protect their wares from piracy. But it is far from clear what effect the proposal might have on working scientists, what databases would be affected, and how courts would interpret new laws. "Nobody understands the full dimensions of this yet," says Richard Halgren, executive director of the American Meteorological Society.

This week, White House and senior agency officials began meeting to work out a U.S. position acceptable to both groups that will be argued at the December meeting of the World Intellectual Property Organization (WIPO), which sets standards on intellectual property rights. Negotiators hope to draw up a treaty outlining the new regime before Christmas.

What has raised the ire of scientists is a draft of the WIPO treaty developed by the organization and representatives of member states, including U.S. Commerce Department officials. Software companies are pushing for the new regime in the wake of a 1991 Supreme Court decision that limited their ability to copyright databases such as the white pages in a telephone book. This spring, the European Community moved to strengthen their hand with a directive that would provide better database protection among member countries starting in 1998. But the policy would not protect private databases in countries outside Europe lacking a similar set of

rules. The WIPO meeting is an effort to come up with a common global framework.

At present, the WIPO draft offers little protection for researchers and educators who use data for noncommercial purposes, say the academy leaders. In a 9 October letter to Commerce Secretary Michael Kantor, they say the new regime "would seriously undermine the ability of researchers and educators to access and use scientific data and would have a deleterious long-term impact on our nation's

research capabilities."

U.S. researchers and educators traditionally enjoy greater access to data than commercial users through a legal principle known as "fair use." The proposed treaty, however, fails to provide such a clear exemption and is antithetical to the concept of full and open exchange of data, according to the academy presidents.

They warn darkly of a "pay-per-use system" that gives vendors essentially perpetual protection of their databases and could allow a company to claim ownership of repackaged government data. The draft also includes harsh civil and criminal penalties—including provisions for third-party liability—for using data without obtaining the approval of the database vendor.

Industry officials discount these worries. Dan Duncan, vice president of government relations at the Washington-based Information Industry Association, says research institutions already pay license fees to enable their scientists to access private databases such as those developed by oil or chemical companies or those that add significant value to government data. And vendors could maintain control over their databases for an extended time only if they made a substantial investment in their products, he adds. "There is a little bit of hysteria tingeing this letter," says Chris Meyer of the Washington law firm Meyer & Klipper, which specializes in copyright law.

Government data are exempt from the proposed treaty, note Duncan and Meyer, meaning that data from NASA's Mission to Planet Earth program, for example, will continue to be available free of charge. However, companies would retain the right to sell gov-

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We believe that these changes to the intellectual property law, if enacted in their present form, would seriously undermine the ability of researchers and educators to access and use scientific data, and would have a deleterious long-term impact on our nation's research capabilities. Moreover, the proposed changes are broadly antithetical to the principle of "full and open exchange" of scientific data espoused by the U.S.

Academy
alert. NAS, NAE, and
IOM presidents want to preserve scientific access to databases.

ernment data that they have repackaged and given added value to. This is a central fear of the academy leaders, although not everyone is as concerned. "For earth scientists, I don't see this as a problem," says Ali Montasser, who oversees information systems for NASA's Mission to Planet Earth. The agency, he says, actually encourages companies to seek ways to profit from the data.

Industry officials note that any treaty would require Senate approval and implementing legislation, a process that they say gives scientists plenty of opportunity to express their views. A bill proposed last May by Representative Carlos Moorhead (R–CA) contains language similar to the WIPO draft and does not exempt researchers and educators, but congressional staffers admit that further work needs to be done before it is reintroduced into the next Congress. "It was drafted in substantial haste," one industry official says.

Meyer says researchers should understand that the goal of a new regime is to prevent piracy on a large commercial scale rather than to deny data to legitimate researchers. For their part, science officials say they respect industry's need for better protection, but insist that they will do what it takes to make their voice heard.

-Andrew Lawler