

edited by RICHARD STONE



928 nuclear tests later. DOE is prioritizing cleanup at the national labs and facilities such as the Nevada test site, shown above.

DOE/PHOTO RESEARCHERS

DOE Devises Blueprint For Better Cleanup

The Department of Energy (DOE) is about to undertake a new approach to cleaning out its Augean stables. Next month, the department will unveil its first attempt to prioritize all of its waste management activities at the agency's weapons testing grounds and national labs.

DOE's cleanup efforts have come under heavy fire for promising a lot but delivering little bang for the buck. And DOE has spent a lot of bucks on environmental remediation over the past 5 years—\$18 billion to be exact. Reflecting disappointment over the program, Congress last fall slashed DOE's environmental management budget from \$10 billion to \$6 billion in 1995 and ordered it to devise a better plan.

To organize this Herculean effort, DOE Assistant Secretary Thomas Grumbly last fall created an office of integrated risk management and hired a top gun in risk assessment to direct it. The new chief, toxicologist Carol Henry, was formerly head of the California Environmental Protection Agency's health hazard assessment office. Henry will assemble data on DOE's disparate risks—from nuclear waste to crumbling facilities—that Grumbly and other policy-makers will use to prioritize spending in their shrinking budget.

In a report to be delivered to Congress next month, Henry's team categorized 1200 environ-

mental management activities as either low, medium, or high risk and parsed them according to a threat's severity and duration. The matrix distinguishes, for instance, between chemicals in labeled bottles and those leaching into the ground and threatening drinking water. "We still have the potential for very big problems," says Henry. "But this will allow us to sequence

our activities so we can address the worst problems first."

U.S. to Finance Science Center at Chernobyl

To prevent a repeat of the explosion 9 years ago at the Chernobyl nuclear reactor complex that dumped fallout over parts of Ukraine and Belarus, the Clinton Administration is helping Ukraine establish an international nuclear safety and environmental research center.

The center's main mission is to provide expertise for shutting down the reactor complex, which Ukraine has pledged to do by the year 2000. So far, several West-

ern nations have committed nearly \$200 million toward financing the shutdown and providing alternate energy sources.

"But fixing the problems at Chernobyl takes more than money," says Laurin Dodd, director of international nuclear programs at DOE's Pacific Northwest Laboratory (PNL), which is leading the \$3 million effort to establish the center near Chernobyl. The center will train Ukrainian scientists and engineers in how to safely operate Chernobyl's intact reactors and help them figure out how to dismantle the destroyed reactor, which is encased in concrete.

DOE's motives for launching the center aren't purely altruistic. According to department scientists, Chernobyl is a natural lab for studying radionuclides in the environment and testing waste remediation techniques for possible use at DOE's own labs.

PNL Director William Madia met with Ukrainian environment minister Yuriy Kostenko in Washington this week to hammer out details of the agreement, which also involves the U.S. State Department and the Nuclear Regulatory Commission. The center is expected to be up and running within 2 years.

National Labs Up for Grabs?

The presidents of several major research universities are casting a covetous eye on the national laboratories run by the Department of Energy (DOE). Their idea: Release certain labs from DOE's marching orders and instead align them with a coalition of universities dedicated to performing basic research and training scientists.

The informal discussions among the university heads are a reaction to several recent developments, including the rising cost of maintaining campus-based facilities, an outside panel's recommendation that DOE privatize the labs, and congressional proposals to eliminate DOE.

What the academic leaders have in mind, says University of Michigan President James Duderstadt, is putting billions of dollars of equipment to the best use. Labs such as Argonne and Brookhaven have outgrown their original purpose of designing nuclear reactors, he says, but they could make major basic research contributions. Duderstadt sees Fermilab, run by the 80-member Universities Research Association (URA), as a model for the arrangement. Indeed, URA's president, Fred Bernthal, earlier this year told a Senate panel that links between the labs and academia "must be revitalized and strengthened."

Unfortunately for those pushing for change, DOE is in the final stages of negotiating multiyear contracts with the University of Chicago to manage Argonne and with Associated Universities Inc. to run Brookhaven. But that doesn't bother Duderstadt. Noting that the House recently passed a budget resolution that would eliminate the department, he says a DOE contract is binding "only if DOE is still around."

Gallo to Relocate

On 22 May at 9 p.m., AIDS researcher Robert Gallo finally put it in writing: He is leaving the National Cancer Institute to launch an Institute of Human Virology under the auspices of the University of Maryland, Baltimore, and the University of Maryland Biotechnology Institute.

Gallo's decision to sign with Maryland followed months of negotiations with three other universities (*Science*, 14 April, p. 191). "Some of the other offers were wonderful," says Gallo, whose lab first proved that HIV is the cause of AIDS. But Maryland, with help from governor Parris Glendening, "put together a package that allows us to do more than anyone else," Gallo says.

The Maryland deal gives Gallo's institute a \$13 million war chest for starters and access to the university hospital. Joining Gallo at the new institute—which will focus largely on HIV and AIDS—will be top AIDS researchers William Blattner and Robert Redfield. Gallo expects to make the move in the fall, when the building is ready.

Biotech Firms Square Off Over Plant Patent

Yet another battle is about to be waged in the war over agricultural biotech patents. Earlier this week, Mycogen filed suit against Monsanto for allegedly infringing a patent on creating insect-resistant plants.

Since 1992, several biotech firms have become embroiled in major legal tussles over broad patents for genetically altered plants (*Science* 5 May, p. 656). Mycogen's patent, awarded in January, covers any method of modifying *Bacillus thuringiensis* (Bt) gene sequences to make them resemble plant genes, which allows the plants to produce an insect-killing protein.

Monsanto, meanwhile, has Bt patents of its own and is seeking approval to sell cotton and potato plants engineered with Bt genes. Mycogen's suit, filed in federal district court in San Diego, seeks an injunction to stop Monsanto from developing and selling Bt plants and seeds.