SCIENCESCOPE

edited by RICHARD STONE

DOE

Waste resting place? EPA stands between nuclear waste and WIPP.

EPA Readies for a WIPPing

A new storm is brewing in the desert near Carlsbad, New Mexico, over the beleaguered nuclear waste repository known as the Waste Isolation Pilot Plant (WIPP). This time WIPP's critics are focusing their attack on the Environmental Protection Agency (EPA). At hearings earlier this week in three New Mexico cities, the critics were planning to shore up what they see as the lone barrier to the $1.3 billion facility's opening: a set of rules issued by EPA.

Last October, Congress cleared the way for the Department of Energy (DOE) to start testing WIPP's ability to store transuranic waste, the plutonium-laced detritus of the U.S. nuclear weapons program. The only catch: Congress ordered EPA to strengthen radiation protection standards that govern the facility by 30 April.

EPA issued draft standards for comment earlier this month. An update of regulations issued in 1985, the new standards increase from 1000 to 10,000 years the minimum time that WIPP must prove it will guard against excessive human exposure to radiation after waste is stored. In addition, WIPP must show that radionuclide levels in the local groundwater will stay within acceptable limits for 10,000 years.

WIPP critics have found fault with the EPA standards. "They need to be [further] strengthened," says Lindsay Lovejoy, an assistant attorney general for the state of New Mexico. Lovejoy argues, among other things, that EPA vastly underestimates the amount of radiation that will be given off by transuranic waste. EPA scientists, tasked to review WIPP's compliance with the standards periodically, say they're all ears.

Biotech Industry Reels On Sepsis Drug News

Biotech officials would be the first to attest that bad news comes in threes. Earlier this week, Synergen Inc. became the third company in less than a year to suffer a setback in marketing a drug for the treatment of sepsis.

The first blows came last spring, when the Food and Drug Administration (FDA) failed to approve applications for two monoclonal antibodies (Centocor's Centoxin and Xoma's E5) for sepsis, a massive infection that kills about 100,000 people a year. Last month, Centocor compounded the bad news when it said it was halting clinical trials of Centoxin.

Biotech analysts had reason to hope that Antril, Synergen's lead product, would perform better because it works differently (by blocking interleukin 1 binding). Moreover, in a Phase II trial of Antril in 99 patients, a range of doses decreased patient mortality 27% to 64% compared to a placebo.

These hopes ran into trouble on 22 February, however, when Synergen revealed that in Phase III clinical trials involving 893 patients, Antril decreased patient mortality only 9% to 15%. In a statement, Jon S. Saxe, president of Synergen, conceded: "...We were disappointed that the results did not match those of the earlier trial." Nevertheless, he maintains, the drug did show clinical benefit, especially in the sickest half of the sepsis patients who showed a 20% to 25% reduction in mortality. Saxe told reporters that Synergen still plans to file for FDA approval of Antril in the third quarter of the year.

Industry observers predict that Antril may face rough sledding at the FDA, however. "I don't think the data from this trial are going to be compelling enough to get Antril approved," says Denise Gilbert, a biotech analyst at the San Francisco office of Smith Barney. Adds another analyst: "People are going to be tiptoeing around biotech stocks for a while." Indeed, Synergen stock fell 68% the day the news came out.

Dental Institute Looks For Big Changes

Research at the nation's top dental institution has been headed in the wrong direction, some researchers believe, and for months these critics have been looking for a way to chart a new course. Now a new guide star has appeared in the form of an advisory report to the National Institute of Dental Research (NIDR), recommending future directions for the institute.

Last September, NIDR's advisory council created a panel of independent scientists to review the institute's intramural research program (IRP). In a draft report, the panel recommends that NIDR (part of the National Institutes of Health) strengthen its clinical program, nurture ties with academia and industry, and bolster training of researchers, especially women and minorities. In general, says panel member Arnold Bleiweis, a dental researcher at the University of Florida, "we were impressed by the majority of the work done at the institute."

But the panel criticizes NIDR management. The report states: "The organizational structure of the IRP has drifted toward excessively parochial decisions hindering communication...and cultivating levels of distrust."

The panel recommends that future scientific directors at NIDR "should not have major laboratory responsibility." Abner Notkins, a respected immunologist, was NIDR's scientific director until he stepped down last September. Notkins agreed with the broad conclusions of the report. However, he declined to discuss what he said were personality conflicts at the institute.

Earlier this week, the panel was finalizing its report for an upcoming meeting of the NIDR advisory council. NIDR director Harald Loe, for one, is ready to embrace the report. "I think it's a good blueprint," he says.

Clinton Begins to Flesh Out Science Staff

Stuck in the logjam at the Clinton White House are some candidates for top scientific and technical posts in the new government.

At the Pentagon, one candidate said to be waiting in the wings is Sheila Widnall, aeronautics professor at the Massachusetts Institute of Technology (MIT) and former AAAS president, possibly in line to become secretary of the Air Force. Another is Harvard weapons policy expert Ashton Carter, candidate for assistant secretary of defense for international security policy. Faculty at MIT hear that another colleague—former MIT provost John Deutch—will be heading back to Washington to run procurement at the Pentagon.

For D. James Baker, president of the Joint Oceanographic Institutions, the process is even further along: He's been nominated to become under secretary of commerce for oceans and atmosphere, which gives him command of the National Oceanographic and Atmospheric Administration.

Philip Lee is said to be a top candidate for assistant secretary of health at the Department of Health and Human Services. Lee, who directs the University of California, San Francisco's, Institute for Health Policy Studies, was a health official in the Johnson Administration.