

Briefing:

States Seek Remand of EPA Waste Regs

The Environmental Protection Agency's long-delayed standards for regulating radioactive emissions from high-level nuclear waste sites are being challenged by the Natural Resources Defense Council. The 50,000-member national organization, two other environmental groups, and four states have petitioned U.S. courts of appeals in

from natural background, medical, fallout, and nuclear power plant sources.

Environmental groups also say that the agency's "special source" provision fails to protect water resources that have yet to be tapped as a major source of drinking water. As David Berrick, an attorney with the Environmental Policy Institute, reads the agency's rules, water resources in the vicinity of waste storage facilities could become contaminated to unacceptable levels, if they are not being used by "thousands of persons" at the time DOE chooses a site location. One



EPA's rules apply to storage locations for high-level wastes and to future repositories, one of which might be located at these candidate sites.

Boston, New York, New Orleans, and St. Louis to order that the rules be redrafted.

NRDC contends the regulations, which were issued on 19 September, fail to adequately protect ground-water resources and the public from contamination stemming from the storage and disposal of radioactive wastes originating from defense, research, and nuclear power activities. The Department of Energy is planning to construct two repositories that would each store 70,000 metric tons of civilian and military high-level wastes. Sites are being examined in five western states and 17 eastern and midwestern states.

NRDC attorney Dan Reicher says a provision giving the agency administrator the option to set an alternative standard at certain waste management facilities appears to be arbitrary. It would permit incremental public exposure equivalent to a 100-millirem annual dose and an infrequent exposure equivalent to 500 millirems annually, excluding background and medical procedures. When the optional authority is not exercised, the general public residing in the vicinity of such facilities could have an incremental whole-body exposure of 25 millirems and an exposure of 75 millirems to any critical organ. On average, Americans annually receive 50 to 150 millirems of radiation

EPA official conceded privately that the agency's failure to provide equal protection for untrapped sources of drinking water may be hard to defend.

The environmental groups and states, which have yet to file briefs with the courts, also are expected to argue that EPA's rules lack adequate enforcement provisions, are inconsistent with Nuclear Regulatory Commission regulations, and fail to address the effects of alternative disposal methods such as underground injection. ■

MARK CRAWFORD

End of the Line for Synfuels Corporation

Nearly 6 years after Congress set up the U.S. Synthetic Fuels Corporation to develop a broad spectrum of technologies to produce gas and liquids, the quasi-federal operation is going out of business. Wracked by charges of mismanagement and paralyzed for a period by the lack of an operating quorum on the board of directors, the corporation committed just \$1.3 billion of its original \$14.9 billion in spending authority.

For a dozen companies that have been pressing the corporation for action during the past several months, time has run out. The continuing resolution, a catchall appropriations bill for unfunded federal programs, was signed by President Reagan 19 December, and it phases out the corporation within 120 days. The corporation's board of directors is slated to be dissolved within 90 days and is explicitly prohibited from making any further awards of loan or price guarantees.

All but \$400 million of SFC's program authority was to be rescinded. The remainder will be used to fund research on advanced coal-combustion and cleanup technologies, providing \$100 million in fiscal year 1986, and \$150 million in each of the following 2 years. The Department of Treasury has been appointed the task of monitoring the activities of projects that received SFC loan and price guarantees.

The largest beneficiary of SFC assistance is Dow Chemical Company's synthetic gas project at Plaquemine, Louisiana, which has \$620 million in price guarantees. Union Oil Company has SFC price guarantees of \$500 million for production of jet fuel from Colorado oil shale. Another \$120 million was awarded to a consortium of companies led by Southern California Edison Company for the Cool Water combined-cycle coal-gasification plant near Daggett, California. And Greenwich Oil Company recently landed \$60 million in loan and price guarantees for production of heavy oil at its Forest Hill project in Wood County, Texas. ■

MARK CRAWFORD

Dinosaurs Ruffle Some Feathers in California

Scientists in California who lobbied for a sophisticated (not to mention accurate) treatment of evolution in schoolbooks won a victory last September. The Board of Education rejected all the 7th and 8th grade science texts submitted for review, asking that publishers sharpen the parts dealing with evolution. Now the changes are in, and those who sought them are disappointed. In some cases the "improvements" are as bad as or worse than the original language, several critics say.

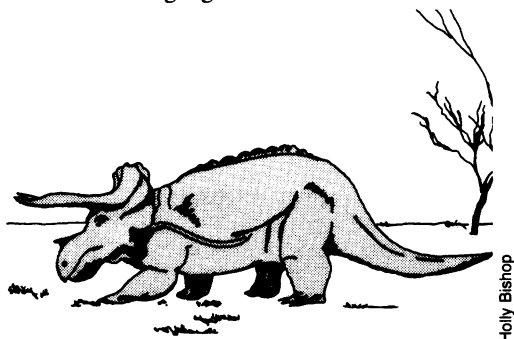
Nevertheless, the Board of Education voted on 12 December to accept them. These books will not come up for review again in California for another 5 years. Meanwhile, the board moves on to inspect math, history, and literature texts, which also are said

to suffer from "dumbing down" by the publishers.

Kevin Padian, a paleontologist at the University of California at Berkeley, offers a sentence from one of the science books as an egregious example. In the original, it said, "Many scientists think that dinosaurs were the ancestors of modern reptiles." Publishers have retreated to words such as "think" and "believe" in an attempt to be as vague as possible on the subject of evolution. At one hearing, Padian brandished a dinosaur bone to show how little the theory rests on belief and how much on substance.

In this case, as Padian says, scientists would never think these thoughts anyway because they know that dinosaurs are *not* the ancestors of modern reptiles but of birds. The reptile group split off 250 million years ago and went its own way. When the revised text came out this month, the new, unequivocal sentence read: "Scientists classify dinosaurs as the ancestors of modern reptiles." Wrong again.

Padian sees this as a sign that the state reviewers need some expert help. They had no biologist or paleontologist on their panel. Several scientists' offers of aid were ignored. Moreover, according to Padian, the state made it difficult to learn what was happening in negotiations with the textbook publishers. The only way to see the changes being proposed was to go to the Board of Education office in Sacramento during working hours and read (but not duplicate) the new language.



A textbook example of evolution.

Although the commission on science books has finished its work, it did allow for one last appeal by the scientists. They may take the list of factual errors they found to the Board of Education for a final consideration. The list is formidable. Padian claims there are 52 errors in 17 pages on genetics and evolution in one book. Even in the Prentice-Hall text, considered the best of the lot, the 21 revisions produced 17 bad results, by Padian's count. These may be corrected, but there will be no further attempt to sharpen the discussion of evolution. ■ **ELIOT MARSHALL**

EPA Sued on Acid Rain

Given the reluctance of the Environmental Protection Agency and Congress to regulate acid rain, northeastern states and environmental groups are resorting to the courts to spur EPA to action. In December, several states and environmental groups filed suit against EPA, calling for tighter federal air standards on sulfur-related compounds that contribute to acid rain.

The suit is the latest of several that have been brought against EPA in the past 2 years concerning acid rain. Each one takes a different tack, but the goal is to get EPA to clamp down on sulfur emissions from mid-western industry.

The latest suit charges that EPA has failed to meet several congressionally mandated deadlines to revise standards on air quality. The last time EPA issued limits on sulfur oxides was in 1973. Under the Clean Air Act, EPA was supposed to review and decide whether to modify these limits by 1980.

EPA has done neither as yet, despite a wealth of scientific evidence that sulfur compounds are harmful to public health and to the environment, the suit says. The charges were brought by the Environmental Defense Fund, the Natural Resources Defense Council, Sierra Club, and the states of New York, Massachusetts, Minnesota, Vermont, and others.

One key objective of the lawsuit is to compel EPA to regulate sulfates for the first time. Since 1973, the only sulfur oxide compound that EPA has set limits on is sulfur dioxide, which is generated by coal-burning industries. But EPA itself has reported that sulfur dioxide levels are not a reliable indicator of sulfate concentrations, the suit says. Sulfates jeopardize the health of asthmatics, reduce visibility and damage buildings, soil, water, and forests, the suit asserts.

Many of the same environmental groups and states participating in this litigation have sued EPA under other Clean Air Act provisions. They scored a temporary victory earlier this year when a federal court ruled that EPA had failed to require tougher state air pollution laws in order to prevent environmental problems in Canada. EPA is appealing the decision. In another challenge, states petitioned EPA to regulate sulfate pollution coming across the border from other states. EPA, however, rejected the argument, saying that it only has the authority to control sulfur dioxide. EPA has also been sued over recent regulations on the tall stacks of coal-burning plants that emit sulfur dioxide. Environmental groups are pressing for tighter controls, and industry wants them relaxed.



Friends of the Boundary Waters

EPA spokesman Chris Rice said that the agency "shares the concerns" about sulfur emissions. But other than that, the agency isn't either saying or doing very much about acid rain regulation. ■ **MARJORIE SUN**

Comings and Goings

Siegfried S. Hecker, chairman of the Los Alamos Center for Materials Science, has been named the new head of the Los Alamos National Laboratory. He succeeds Donald M. Kerr, Jr., who resigned in October. Hecker, 42, who earned his doctorate in metallurgy at Case Western Reserve, has spent all but three years of his professional career at Los Alamos.

C. Paul Robinson, the principal associate director for national security programs at Los Alamos National Laboratory has announced that he will resign on 23 December. **John Hopkins**, a nuclear physicist who directs the laboratory's weapons development programs, has been named to replace him on an interim basis.

Robinson, a nuclear physicist who has been with the lab for 18 years, will become principal scientist and a group vice president with Ebasco Services Incorporated in New York. Ebasco, a subsidiary of Enserch Incorporated in Dallas, has built more than 700 fossil and nuclear power plants and was the principal contractor for the tokamak fusion test reactor at Princeton University. The firm does no nuclear weapons work "at the moment," Robinson says, although it is interested in constructing nuclear weapons storage sites in Europe and test facilities for the Strategic Defense Initiative in the United States.

The Worcester Foundation for Experimental Biology also has a new head. **Thor Pederson** has succeeded Mahlon Hoagland as president and scientific director. Previously, Pederson was director of the foundation's cancer center.