

violation of patient rights. Gore said to M. D. Anderson professor Emil J. Freireich, "What bothers me is that you don't seem to recognize . . . that this grand motivation [to pursue science] can obscure the approach to the individual patient."

Freireich replied that federal regulations were becoming overly burdensome and are hampering scientific progress. "These regulations are in fact harming the very patients they are designed to protect." He argued that patient consent forms are frightening cancer patients by disclosing the "intimidating details" of their treatment.

At the Senate hearing, Charles A. LeMaistre, president of the University of Texas System Cancer Center, further defended M. D. Anderson. "It is clear that the violations were procedural in nature, that there were no ethical violations, no intent to deceive and no harm to patients in this study."

Hawkins declared that the evidence her subcommittee staff gathered "painted a very bleak picture." She said that the drug development program "has been confused and disorganized and painfully slow to react. Either you promptly report life-threatening drug reactions or you don't; either you obtain adequate informed consent from patients who volunteer themselves for experimental use or you don't," she declared.

DeVita pointed out that the matter of reporting adverse reactions quickly enough "will always be a problem." It is difficult to sort out whether health complications stem from drug treatment or the disease itself, he stated. Only with benefit of hindsight does the relationship become clearer, DeVita said. At the House hearings, he said that during the past 18 months, more than 1400 terminal cancer patients have entered experiments that test a new anticancer drug for the first time on humans. Less than 3 percent, or 43, of these patients died of "true drug-related causes," he said. Beneficial response rates frequently exceed this figure, the NCI director noted.

Senator Edward Kennedy (D-Mass.) defended the institute. "The problems are serious and they have to be remedied. We should also understand that NCI is not an agency in crisis. That agency has done more to enhance life than any other agency in government," said Kennedy, whose own son, Teddy, has survived bone cancer.

The cancer institute, however, will continue to be the object of investigation. Hawkins and the *Washington Post* have promised to probe NCI further.

—MARJORIE SUN

## Northern Tier Pipeline in Trouble

The United States at present has no major pipeline to carry crude oil from the West Coast to major markets in the middle of the country. If a decision made by a council in the state of Washington this fall is allowed to stand, the only existing proposal to build such a line may be killed.

The pipeline project, financed by a consortium known as the Northern Tier Pipeline Company, received much attention during the Carter Administration. Congress even designated it a high-priority energy project in the national interest. It would relieve the crude oil surplus (about 400,000 barrels a day) now found on the West Coast and provide an efficient new route for transporting oil to the Midwest. The pipeline would run from Port Angeles at the northwest corner of Washington through Washington and four other states, ending in northern Minnesota.

The federal government and four of the states involved have handled applications for construction permits quickly. But state officials in Washington have decided that there is more to be lost than gained by cooperating, and they have voted to deny a construction permit.

On 16 October, the state Energy Facility Site Evaluation Council (EFSEC) voted by a large margin (22 to 4) to turn down the application submitted by Northern Tier. EFSEC Chairman Nicholas Lewis describes this as a preliminary vote and an attempt to get the council's judgment "out on the street for public comment." Since Northern Tier filed its first application in 1976, an EFSEC examiner has collected 45,000 pages of testimony from the company and 29 intervenors.

EFSEC has invited the applicant to respond to its decision before a final vote is taken in mid-November. The chief objections to the proposal, according to Lewis, have to do with the siting of the tanker port and the safety of a submarine segment of the pipeline.

Tankers bringing oil from Alaska would dock at a terminal on a spit of land outside Port Angeles, 7000 feet from the center of town and 8000 feet from the only hospital in the area. If there were an explosion, Lewis says, it might wreck the hospital. He adds that it would take 2 hours to bring emergency help in by helicopter. EFSEC was not satisfied with the company's research on the effects of tidal water scouring on an 18-mile segment of the line which would be placed under Puget Sound. If earth covering the line washed away, the pipe might buckle and break, spilling 20,000 gallons of oil before the leak could be stopped, damaging the state's precious fisheries.

When EFSEC looked into local benefits from the project, Lewis says, "We frankly couldn't find much." There would be some short-term employment for construction and a remote possibility that a spur line would be built to supply oil to a new refinery in eastern Washington. But, without a firm appeal in the name of national security, EFSEC decided that it could not justify the risk to the local environment.

Secretary of Energy James Edwards did write to Washington's Governor John Spellman last August. But the letter made only a mild appeal for accelerated licensing, urging the state to let the free market work its will. Edwards did not base his request on any national imperative.

Jerry Smedes, an environmental scientist employed by Northern Tier, claims that fears about a tanker explosion are unwarranted. A worst-case engineering study, he says, indicates that an explosion would do no significant damage to structures beyond 2500 feet. He also says that concerns about underwater erosion and pipe breakage are exaggerated since the company has promised to carry out regular inspections along the entire submarine route of the pipeline. Erosion would not occur suddenly, he claims. But Smedes does not think it likely that a majority of EFSEC could now be persuaded to reverse the vote of 16 October. Nor does the company have plans at the moment to submit a new application.

The governor must affirm or veto EFSEC's ruling within 60 days after the final vote this month. Spellman has said that he is inclined to listen to his council's recommendation unless he finds that some important evidence has been ignored.—ELIOT MARSHALL