

Oil-profits tax ruled unconstitutional

The "windfall-profits" tax was passed in 1980 to capture roughly half the profits oil producers were expected to net from price decontrol (SN: 4/12/80, p. 238)—an estimated \$227 billion over this decade. But on Nov. 4, a U.S. District Court judge in Wyoming ruled the tax unconstitutional.

Independent oil producers and royalty owners brought suit against the U.S. government charging that because certain Alaskan oil was exempt, the tax was nonuniform. A tax waiver had been written into the law exempting oil from the Sadlerochit Reservoir and a well north of the Alaska-Aleutian Range. This waiver had been intended to compensate oil companies for investing in the costly proposition of drilling and producing oil in those particularly difficult, remote conditions. But the first article of the Constitution requires that taxation is only legal if applied uniformly throughout the United States.

Judge Ewing T. Kerr ruled that the Alaskan exemptions must negate the entire law since it was clear, he said, that "the Act as it exists today would not have passed without the invalid Alaska Provision." The Justice Department has not yet ruled on whether it will appeal the decision. Meanwhile, the Internal Revenue Service has decided to continue collecting the tax until any appeals have been decided.

Although in his presidential-campaign speeches Reagan criticized the idea of a windfall-profits tax, there is speculation he may push for Justice to appeal anyway, owing to the intense pressures that losing this source of revenue will place on the nation's budget planners. More than \$40 billion has already been collected since the tax went into effect.

Objections filed to whaling ban

The Japanese government announced Nov. 2 that it will formally protest the International Whaling Commission's decision to ban commercial whaling within three years (SN: 7/31/82, p. 71). The world leader in whaling, Japan harvested a third of the estimated 14,000 whales killed last year. Japan said its challenge of the ban was based on a belief that the proposed moratorium had "no scientific justification." Peru, Norway, Chile and the Soviet Union also filed formal objections to the proposed ban. John V. Byrne, U.S. Commissioner to the IWC, said he was disappointed "but not disheartened" by these moves, and that the United States would continue vigorously pushing for a total end to commercial whaling.

Tamper-resistant packaging rules

Seven Chicago-area deaths, 8 weeks ago, from Extra-Strength Tylenol capsules contaminated with cyanide highlight the current risk consumers face from malicious tampering with drugs and cosmetics sold "over the counter" (OTC). Hoping to curb such tampering, the Food and Drug Administration published final rules on Nov. 5, requiring that OTC drugs (other than insulin, dentifrices and products applied to the skin), most cosmetics (except those applied to the skin) and certain "devices" (such as contact-lens solutions) must be manufactured with tamper-resistant packaging beginning next year. By May 5, these products must also bear labeling to warn users that a breach of tamper-resistant packaging may indicate contamination. Retail sales of existing affected products will be permitted through February 6, 1984, however, to allow for depletion of current stocks with conventional packaging.

Products most vulnerable to tampering, primarily nontablets, must make the transition to the new packaging by Feb. 7. Oral and vaginal OTC tablets, and vaginal and rectal suppositories must be similarly packaged by May 5. Manufacturers may be given extended deadlines if they "adequately demonstrate" that despite a good-faith effort they cannot comply in time.

Cracking down to bedrock

As groundwater is pumped out of aquifers in the western United States, venous networks of fissures develop, marking areas where the land has subsided. Where and when these fissures will form can be predicted, report two researchers from the U.S. Geological Survey in Menlo Park, Calif. Writing in the October *GEOLOGICAL SOCIETY OF AMERICA BULLETIN*, Robert Jachens and Thomas Holzer argue that buried bedrock features such as hills, ridges and ledges determine the pattern in which loosely consolidated sediments bend and pull apart as water is removed. As tension builds, the soil cracks, much as a plate cracks when it is bent, the authors note. They tested their hypothesis in a four-mile-square study area near Casa Grande, Ariz., and were able to correlate the pattern of cracks with irregularities (revealed by gravity measurements) of features in the underlying bedrock.

Super-seeder?

What's more powerful than a speeding locomotive, leaves a runaway in a single bound, and seeds a cloud without using silver iodide? An airplane, say researchers from the University of Washington in Seattle. During flights to collect information about types of clouds that might be used for seeding experiments, Peter Hobbs and Art Rangno noticed that even in unseeded clouds, when a plane crossed a track that it had made on a previous penetration, laser beams used to count ice particles observed ice where none had been on the first entry. The plane, they speculate, may itself produce the ice. The ice may form on the plane's body and then blow off behind it, or it may form around exhaust particles that act as nucleating agents. The possibility "introduces a further complication into previous cloud seeding experiments using aircraft," Hobbs says. Because researchers conducting cloud seeding experiments use planes to observe their results, if the planes are contributing a portion of the ice, measurements may be distorted. Hobbs says the volume of the seeded cloud is fairly small, but adds that it is not clear whether the ice crystals disperse throughout the cloud and affect subsequent ice formation.

Earth science briefs

- Snow covered less of the Northern Hemisphere this year than in any year since record keeping began in 1967, the National Oceanic and Atmospheric Administration reports. NOAA satellites recorded that from June through August, average snow cover was 3.4 million square miles, nearly 1.1 million square miles less than normal for that period.
- After the staggering costs incurred in 1980 from weather-related damage to crops, commerce and property, Americans earned their respite. An annual weather summary released by the Center for Environmental Assessment Services shows that damage in 1981 totaled \$3.6 billion, down from \$25 billion.

Aviation weather overseer

In the aftermath of several recent airplane crashes related to weather, the Federal Aviation Administration has appointed an official to manage and coordinate the agency's aviation weather system with operations of the National Weather Service. The appointment follows recommendations issued in August by House subcommittees overseeing aviation safety research. A spokesman for the House Science and Technology Subcommittee on Aviation says the goal of the appointment is to eliminate overlap of services and to improve communication, both of weather information to pilots and between the agencies and Congress. Weather is a factor in more than 50 percent of air carrier accidents (SN: 8/21/82, p. 118).