## New reports set up clean air debate

Controversial recommendations and criticism of the Clean Air Act emerged from two major studies aired this week before a joint hearing of House and Senate environment committees. Proposed changes in the Clean Air Act are expected to preoccupy those committees for much of this year. And assessments of how the act has performed — by the National Academy of Sciences and National Commission on Air Quality — should fuel the upcoming debates.

Both studies were commissioned by Congress when the act was amended in 1977. NAS was asked to examine provisions for "prevention of significant deterioration" — PSD — in air quality. Congress created the 13-member air quality commission to look at federal and state pollution-control efforts with an eye toward securing a data base for drafting recommendations on whether and how to change the Clean Air Act when its reauthorization came up this year.

"It is certain that if the Clean Air Act had not been enacted, our air quality would be far worse today than in 1970," said the Commission's chairman, Sen. Gary Hart (D-Colo.) on Tuesday. "Instead, our air is measurably better, and is continuing to improve." Hart claims the 433 findings and 109 recommendations adopted by the Commission are aimed at preserving the trend.

The two studies shared several major recommendations. Among them, that Congress:

• consider establishing limits for measures of pollution that previously had been

unaddressed (i.e. long-term exposures to ozone, emission of especially fine particulates and releases of carbon monoxide at high altitudes),

- provide greater flexibility in the act's enforcement now "too rigid," and
- retain emission control of new sources of pollution based on "best available control technology."

But there are also notable differences in the studies' recommendations. For instance, the Commission recommends setting nationally uniform levels of required pollution controls for new sources, regardless of whether a new plant would be located in an area whose air is already clean or dirty. The NAS study's authors would instead encourage each area to independently use PSD-provisions as benchmarks and then set individual policies to encourage what is locally considered the best use of clean-air resources: That could include choosing to license facilities on the basis of jobs created per unit of pollutants emitted.

Even within the Commission there were unresolvable conflicts. For example, three of its members — an epidemiologist, a legislative director for the United Steelworkers of America union and a representative of the Natural Resources Defense Council — dissented strongly with several key recommendations: to eliminate deadlines for achieving health standards, to eliminate a requirement that new plants in polluted regions meet the "lowest achievable emission rate," to allow automatic approval of even defective state pollution-control programs if the federal government delays in reviewing them and to abandon air-quality measures designed to prevent significant deterioration of air quality outside national parks and wilderness areas.

## Psychologists get direct pay ruling

On Feb. 23 the Supreme Court let stand an appeals court ruling that Virginia physicians had conspired to obstruct trade by preventing direct insurance payments to psychologists. The two state Blue Shield medical plans previously had required that payments for psychotherapy by psychologists be billed through psychiatrists or other medical doctors. The outcome of this case may have effects on the nationwide Blue Shield Association, which represents 68 prepayment plans composed of 80 million subscribers.

Virginia Blue Shield has allowed psychotherapy payments since 1962, but in 1972 it limited such payments to psychologists referred and supervised by physicians. A 1973 state "freedom-of-choice" law required direct insurance payments to psychologists, but the two Blue Shield groups refused to comply. The Virginia Academy of Clinical Psychologists and one of its members challenged the billing arrangements as a violation of fed-

eral antitrust laws, but a Federal District Court judge ruled that the policies did not affect trade and were not subject to federal laws. The decision was reversed last June by the Fourth U.S. Circuit Court of Appeals. It called the policies economically restrictive and anticompetitive, and concluded that physician supervision of psychotherapy, for the most part, was not effective or not employed. This decision was then appealed to the Supreme Court. In a separate state ruling, the Virginia Supreme Court upheld the constitutionality of Virginia's freedom-of-choice law last August. Since then both plans have begun direct payments and are under court order to make any other payments outstanding since Jan. 1. 1979.

This battle, siding insurance companies and physicians against psychologists, has been part of the increasingly volatile war among health-care providers over access to reimbursement systems. Insurers now play a major role in defining "healers."

## A grassroots astronomy satellite

The numerous pro-space citizen organizations proliferating around the country are engaged in projects ranging from generalized lobbying to studying the adaptability of Mars for human habitation to developing solar sails. One of the more technically ambitious goals is now being sought by a largely student group based at Rensselaer Polytechnic Institute in Troy, N.Y., where plans are underway to build an earth-orbiting astronomy satellite whose images can be picked up by amateur slow-scan television operators worldwide.

Founded a year ago, the Independent Space Research Group is headed by RPI physics graduate Jesse Eichenlaub and currently consists of a core of about 20 students and six faculty advisors, with perhaps 60 other members and a few technical consultants around the United States and abroad. Supported by membership dues and industry donations and using off-the-shelf components, the ISRG hopes to construct a satellite equipped with a telescope (six feet long, with an 18-inch-diameter mirror), television camera, spectrograph, photometers and other devices, capable of operating at visible, near-infrared and ultraviolet wavelengths. It would be sent into a 300-mile-high, circular, near-polar orbit, but not by a student-built rocket. The National Aeronautics and Space Administration has occasionally launched payloads for free when there has been extra available space and weight on a rocket carrying some other payload (seven of the freebies were the oscar satellites built and operated by ham radio enthusiasts), and the ISRG is hoping for such an arrangement.

First would come a test satellite, without a telescope, designed and orbited to check out the overall design, attitudecontrol system, electronics and so on, possibly by late 1982 or 1983. Volunteer labor and off-the-shelf parts suggest that it could be made for about \$25,000, says Eichenlaub, who estimates about \$100,000 for the subsequent astronomy satellite (including a backup spare). Amateur radio bands would be used to send commands to the satellites and receive some of their data, while the telescope images would be sent down by slow-scan television, a technology now being used by a growing number of amateur operators. Interested researchers would apply for observing time to the ISRG, which envisions the satellite as a general-access instrument and educational tool available to students, educational institutions and amateur as-

A bi-monthly ISRG newsletter is \$5 per year, or it is included with the tax-deductible \$10 annual dues, payable to the ISRG, c/o John Ginder, 7 Sunset Terrace, Troy, N.Y. 12180.

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