

Water quality: Giving states their guidelines

The Environmental Protection Agency has taken the first steps toward implementation of the Federal Water Pollution Control Act of 1972, passed by Congress in mid-October over a Presidential veto. The law, which prohibits discharge of pollutants into rivers, lakes and wells without a permit, places responsibility for issuance of permits in the hands of the states. State permit programs must meet requirements set by the law and must be approved by the EPA. Last week EPA issued its proposed guidelines for approval of state programs.

Discharge of highly radioactive wastes or of agents of radiological, chemical or biological warfare is strictly taboo, and no permits can be issued for them under any circumstances. Nor can a permit be granted if the Corps of Engineers decides that the proposed discharge would impede navigation. The permits, when issued, must specify what substances can be discharged in what amounts. If some of the discharge requirements are not being met at the time the permit is issued, the permit must also contain a cleanup schedule. The final deadline for industrial water cleanup using "the best available technology" is July 1, 1977.

After the permit is granted, any new or increased discharges must be reported. Polluters must also monitor the amount of flow and pollutant content of all discharges averaging more than 50,000 gallons per day, keeping detailed records for at least three years and reporting at least once a year to the state. In addition, the EPA guidelines provide for state inspection of pollution sources. Permits to municipalities must require secondary treatment of sewage.

The guidelines also make broad provisions for public participation in setting limitations on discharges. When a state receives an application for a discharge permit it must first tentatively decide if the permit will be issued and propose effluent limitations and a compliance schedule. The state must then publish this information in the vicinity of the proposed discharge and receive comments from interested parties for at least 30 days following the notice. Information should be available to anyone who requests it.

Once issued, any permit may be revoked, suspended or modified if there is a change in conditions that requires a reduction or elimination of the discharge. The state is empowered to set civil penalties for violation of permit requirements and criminal fines for "willful or negligent violations."

The new permit program replaces the one instituted two years ago under the Refuse Act of 1899. EPA has received some 23,000 applications from industries for permits under the old system. These, say EPA spokesmen, will simply be considered as applications for permits under the new program.

The proposed guidelines were published in the Nov. 11 Federal Register. □

Air quality: Decision on nondegradation upheld

On June 2, U.S. District Court Judge John H. Pratt issued an extraordinary decision. He ruled that the states are forbidden to allow any further degradation in air quality even if the ambient air standards prescribed by the Environmental Protection Agency are already being met (SN: 6/10/72, p. 372). Environmental observers have called the decision one of the most important ever issued on an environmental matter.

That decision has now been upheld. The action came by the U.S. Court of Appeals in Washington on Nov. 1. As a result, the EPA announced last week that under the provisions of the court decision, all state clean air plans are deficient and must be revised.

The Sierra Club was the plaintiff in the court case; EPA was the defendant. EPA claimed that the 1970 Clean Air Amendments do not imply a nondegradation provision. EPA had not announced last week whether it would appeal the case further to the U.S. Supreme Court. But while it is making up its mind, the agency must adhere to the decision, which prohibits EPA from approving any state clean air plans that would allow "significant deterioration" of air quality.

What the now-upheld June decision said, in effect, is that if air in any given location is of higher quality than prescribed in ambient air standards, it must be kept this way, even if the standards would not be violated by some degree of degradation. But the key phrase is "significant deterioration," and here the interpretations are still being hashed out. National Coal Association President Carl E. Bagge said the decision means "zero growth." Sierra Club spokesmen say privately, however, that it was not their intent to apply such a rigid definition.

The position of EPA Administrator William D. Ruckelshaus appears to be similar to that of Bagge—that the nondegradation provision is unworkable because halting all economic growth is manifestly impossible. However, at a press conference immediately after the lower court decision in June, Ruckelshaus claimed the decision would apply only to areas where air is now of nearly

pristine quality. These areas would be relatively few in the United States.

With so many varying opinions it is difficult to gauge the possible impact of the decision. If it is construed strictly it could mean a halt to any growth of the use of automobiles in cities and of new industry. If the narrower interpretation that the decision applies only to areas with pristine air is the one that holds, the impact could still be immense. Major new power plants planned for the Great Plains may, for instance, have to be scratched.

But the impact on earlier-approved and pending state clean air plans may not be as large as anticipated. Most provisions of these plans are aimed at correcting situations where air quality *does* violate standards, and these implementation plans are likely to stay the same. But it is probable that cities that had planned largely to ignore auto-generated pollutants that are not in violation of ambient air standards will have to think again. □

Lasker honors 18 for cancer chemotherapy

Over the past 27 years, the Albert Lasker Medical Research Awards have become the most prestigious American awards for biomedical research. Usually two awards are given each year, one for basic research and one for clinical research. But this week the Lasker Foundation broke precedent by announcing 18 winners for 1972, all for advances in cancer chemotherapy. "Too many physicians and laymen still think about treating cancer only in terms of surgery and radiation," Foundation President Mary Lasker said. "We wished to point up the progress in treating and curing some forms of cancer with chemicals as well." This year's recipients:

Min Chiu Li of Nassau Hospital, New York, and Roy Hertz of Rockefeller University for cures in gestational choriocarcinoma, a highly malignant cancer which originates in pregnancy placental tissue. A cure rate of up to 90 percent has been achieved in women treated within the first four months of the onset of the disease, through sequential use of methotrexate and Actinomycin-D. Before chemotherapy, 90 percent of the victims died.

Edmund Klein of Roswell Park Memorial Institute, Buffalo, N.Y., for achieving a cure rate of up to 95 percent in patients with skin cancer, by applying an ointment of 5-fluorouracil.

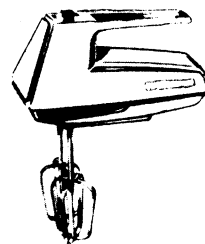
Denis Burkitt of the Medical Research Council, London; Joseph H. Burchenal of Memorial Hospital for Cancer and Allied Diseases, New York City; John L. Ziegler of the National Cancer Institute; V. Anomah Ngu of

the Centre of Health Sciences, Yaoundé, United Republic of Cameroun, for prolonged survival of patients with Burkitt's tumor. This cancer is especially prevalent in African children.

Emil Frei III of Harvard Medical School; Emil J. Freireich of the M.D. Anderson Hospital and Tumor Institute in Houston; James F. Holland of Roswell Park Memorial Institute; Donald Pinkel of St. Jude Children's Research Hospital, Memphis, for prolonged survivals in acute lymphatic leukemia, a cancer of the blood. Before the discovery of chemotherapy for acute leukemia in 1947, it was fatal.

Paul Carbone of the NCI; Vincent T. DeVita Jr. of the NCI; Emil Frei III, for prolonged survival in Hodgkin's disease, cancer affecting the lymph nodes, bone marrow, spleen, liver and lungs. Eugene J. Van Scott of Temple University, Philadelphia, for improved treatment of mycosis fungoides, an especially virulent cancer, beginning on the skin. Isaac Djerassi of Mercy Catholic Medical Center, Darby, Pa., and Emil J. Freireich for supportive measures in treating toxicity, infection and hemorrhage which may result from cancer or from intensive chemotherapy.

The Foundation also presented a special award to Gordon Zubrod of the NCI for focusing the efforts of hundreds of investigators on improved cancer chemotherapy.



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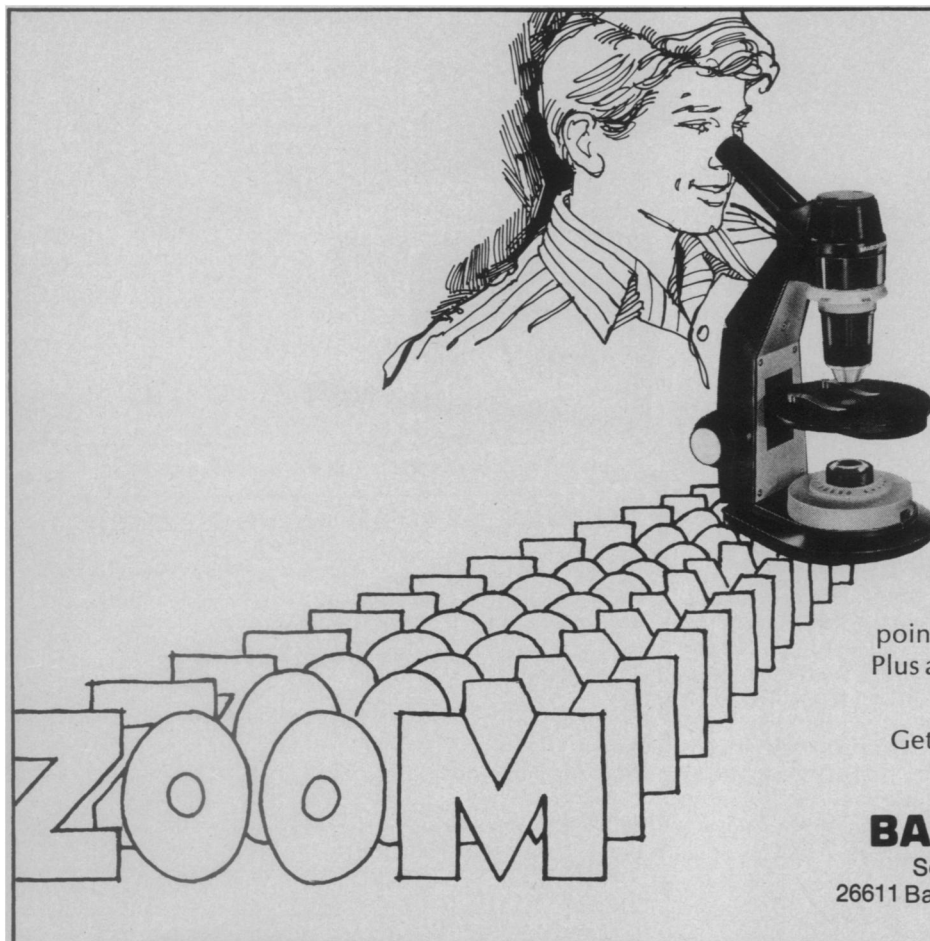
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