

job in enforcing abatement, so they said the states were doing splendidly in promoting clean water, a position which makes it difficult to explain why pollution is proceeding at such a torrential rate. Nonetheless, the bill pays respects to federalist principles by requiring the Secretary to act only in cooperation with state and local officials, and only if state authorities have failed to set adequate standards on their own.

Despite lengthy explications in the hearings and on the Senate floor, both the legal and practical implications of the water standards are a little vague. The most important thing such standards would do is to extend the now limited grounds on which the federal government can intervene in a pollution case. At present the government can step in and enforce abatement action only when it can prove danger to public health or welfare, or at the request of a state governor. Under the new provision, the government could enter when an event occurred (or threatened to occur) which reduced the quality of water below the level established by the Secretary for the particular water in question. Since the new standards are supposed to take into account the "use and value [of such waters] for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial and other legitimate uses," this will result in a far broader measure of federal authority than presently exists.

Supporters of the bill hope that the federal standards will be particularly effective in preventing pollution on waters still relatively clean. In a case such as the St. Croix River between Minnesota and Wisconsin, where conservationists are fighting to prevent construction of a coal-burning power plant that would jeopardize the river's recreational uses, the existence of standards would confront the industry wishing to build with three choices. It might move ahead with its plans but take care to construct treatment facilities adequate to maintain the water quality standards. It might become discouraged and move its plant elsewhere. Or it might ignore federal standards on the chance that no action would be taken. But in any case, it would be forced to confront the issue of pollution more seriously than before.

How the standards will affect presently polluted waters is less clear. Some conservationist groups were worried

that the standards might be set too low and would act to "lock in" pollution levels at the lowest common denominator. But Senator Muskie and others feel that a policy of "orderly development and improvement" of water resources can't possibly do any harm. And he evidently hopes that the standards can be developed in a cooperative fashion that will take some of the accusatory quality out of current enforcement proceedings. Nonetheless, the existing enforcement machinery, which runs a cumbersome route from the conference table, to a public hearing, to the courts (and is apt to take several years) is to be left intact.

Other Measures

Although these measures will go some distance toward promoting a more aggressive antipollution policy, still more steps are plainly needed. One of the most important remaining problems is the inability of many municipalities to meet the costs of constructing municipal waste treatment plants. Until 1961 the federal government could contribute only \$50,000 to each municipality undertaking such a project; in that year the amount was increased to \$600,000; and the present proposals would raise the limit either to \$1 million (the Muskie bill) or \$2 million (the Blatnik version). In New York City alone, however, a single pollution control project has cost as much as \$87.6 million; the much smaller city of Omaha, Nebraska, has spent over \$21 million on a variety of projects since 1956. Further, the appropriation ceiling on federal assistance—it is limited to \$100 million a year—means that only a relatively small number of projects can be supported at all. And finally, the formula for distributing the grants that are available is actually weighted against the populous urban areas where pollution problems are most pressing: 50 percent of the grants have to go to communities with a population of 125,000 or less. There is an additional monetary incentive for grants involving cooperation between municipalities, but in many cases the urban area itself is so large that there is no logic to cooperation. Newark may need New York, but it is less clear why New York needs Newark.

These provisions are not likely to be swept away overnight. But there is continuing interest in this and other remaining problems in the Senate committee, and the interest is coming to

be supplemented by the beginnings of political pressure from senators and congressmen with urban constituencies. The New York senators, Javits and Kennedy, have introduced a bill to raise the federal contribution to 30 percent of the cost of a project, and the overall funds available, to \$250 million. They are also proposing changes in the allocation formula which would end the discrimination against cities.

Whether Congress will be in a mood to pass a second major pollution bill this session seems a bit doubtful. (And there is always a chance, though it seems minute, that something could go wrong with calculations on the present bill as it works its way through the House.) But Muskie's subcommittee is planning to hold hearings on the new proposals, and it is a hopeful omen that these sophisticated and complex problems are beginning to get an amount of attention that, a few years ago, would have been unthinkable.

—ELINOR LANGER

Announcements

The Committee on International Exchange of Persons of the Conference Board of Associated Research Councils has prepared its annual **list of foreign scholars** available for remunerative appointments in American universities and colleges during the 1965–66 academic year. The list contains information about scholars recommended by the U.S. Educational Commissions abroad. Each person is eligible for a government travel grant covering costs of round-trip transportation to the U.S. if arrangements are completed for a lecturing or research appointment at an American school. Copies of the list are available at no charge from Mrs. J. D. Leary, Conference Board Committee, 2101 Constitution Ave., NW, Washington, D.C. 20418.

The University of Iowa has begun a Ph.D. program in **chemical physics**, administered jointly by the departments of chemistry and physics. Information about the program is available from the Chemical Physics Committee, University of Iowa, Iowa City.

Erratum: In the report "Fluorescence polarization: measurement with ultraviolet-polarizing filters in a spectrophotofluorometer" by R. F. Chen and R. L. Bowman (12 Feb., p. 729), the 7th and 8th lines of the legend to Fig. 5 should have read "emission at 461 mμ."