

## Progress in Pollution Elimination

**T**HE Water Pollution Control Law, passed by Congress in the closing hours of the 80th Congress and signed by the President on June 30, at last makes it possible for the Federal Government to assume vital leadership in a nationwide movement to improve existing conditions of the surface watercourses of this country.

Congress has debated the stream pollution problem on and off for the past 50 years, during which time more than one hundred bills have failed of enactment. In the meantime the urban population has increased and manufacturing operations have expanded to the point where in many cities a definite health hazard exists. Only the constant use of chemicals in relatively high dosages has prevented serious epidemics. Such conditions are a disgrace to this country. Here in the Nation's Capital the Potomac River is little more than an open sewer. It shares this odious reputation with many other main waterways with which this country has been blessed and because of which it has prospered.

Under the provisions of Public Law 845 loans can be made by the Federal Works Administration to any state, municipality, or interstate agency to construct treatment works to prevent pollution. These loans for any project can amount to one third of the cost but cannot be in excess of \$250,000. There is no provision for loans to private organizations. Therefore, the full financial burden of eliminating industrial wastes resulting from manufacturing or mining operations by private industry must be borne by the individual companies contributing to the pollution of streams, lakes, or rivers. Industry and the public must recognize that the elimination of wastes is a necessary and legitimate charge against manufacturing operations. In numerous technical programs held in the past few years by the AMERICAN CHEMICAL SOCIETY and other technical groups, speakers have revealed that responsible industrial organizations consider the waste disposal problem an inseparable part of the development of a new process.

A sizable amount (\$22,500,000 annually for five fiscal years) is authorized, but not yet appropriated, for loans to states, municipalities, and interstate agencies.

If Congress will make these sums available an excellent start can be made toward eliminating, or at least reducing, the obnoxious conditions prevailing on most of our surface watercourses.

Of special interest to chemists and chemical engineers are the provisions for additional funds for research to be allotted to the states and the enlargement of the research facilities of the Public Health Service research center at Cincinnati.

In presenting the Symposium on Industrial Wastes, published in the May 1947 issue of this publication, the editors stated:

Heavy emphasis on a chemical engineering approach will prove effective. Through the use of chemistry and chemical engineering techniques manufacturing processes can be modified further to eliminate much of the waste at its source. In this way the volume of material requiring disposal in our lakes, rivers, and streams might be reduced until it could be assimilated by the purifying capacity of the stream itself. Furthermore, chemical engineering techniques may so change the wastes that they will be relatively harmless when ready for discharge.

We are deeply gratified to note the frequency with which the Symposium on Industrial Wastes has been quoted in the past year in Congress, in state hearings, and in meetings called to discuss water pollution problems. The authors who contributed performed a very worthwhile public service, but chemists and chemical engineers must continue their interest unabated if we are to be completely successful in the elimination of dangerous and unsightly waste materials. Pollution, whether it be surface watercourses or the air we must breathe, must be considered a menace and a continuing challenge to American ingenuity. The manufacture of fissionable materials presents still another waste disposal problem of unprecedented magnitude.

Intensified research efforts eventually will provide the technical answers, but an informed and enlightened public must supply the stimulus, for huge sums, both public and private, will be required for years to come if we are to stop fouling the nest. Industrial progress must not be gained at the expense of the health of millions and the destruction of the natural beauty of this country.