MILLIONS OF GALLONS of waste automobile oil may be entering the environment in a detrimental manner, according to a report in Environmental Science and Technology (January). Approximately 500 million gallons of used automobile oil need to be disposed of in some way each year. The U.S. re-refining industry, which reprocesses the used oil, has a capacity of only 100 to 150 million gallons per year. Where the rest of the oil is going is somewhat of a mystery. The federal Environmental Protection Agency suspects that much of the remaining oil is dumped into sewers, onto vacant ground, or into the nearest convenient waterway. Some of the waste oil may be sold to fuel oil distributors who blend it with conventional heating oil and "sell it to unsuspecting customers."

Re-refining of waste oil has become less popular in the past decade because of increased amounts of gasoline additives that can contaminate the oil, and because the re-refining industry has lost a tax advantage it had held over virgin lube oils. Improving technology so that it would be possible to re-refine the waste oil to heating oil encounters the problem of contaminants in the waste oil. EPA has expressed concern that the fuel oil that would be produced by re-refining waste oil may contain potentially hazardous materials such as lead, iron, zinc, barium, and phosphorus. These contaminants would be released to the atmosphere when the fuel is burned.

WATER QUALITY of streams in Erie County, New York has improved following a limitation of the allowable phosphate content of detergents, according to Dr. R. A. Sweeney, director of the Great Lakes Laboratory of the State University College at Buffalo. As of June 1971, detergents sold in Erie County were required to contain no more than 8.7 percent phosphates. Tests run independently by the Erie County Department of Health and the Great Lakes Laboratory have demonstrated that since initiation of the partial ban on phosphates there has been more than a 20 percent improvement in general stream quality (as measured by biological oxygen demand, biomass, and turbidity). Even more dramatic results were found below sewage treatment plant outfalls and overflows from combined sewage collection systems. These streams, previously grossly polluted, showed as much as 50 percent improvement in water quality. Dr. Sweeney told Environment that he anticipated further improvement following the total ban on phosphates in detergents that became binding in Erie County as of January 1, 1972.

PROCTOR & GAMBLE (P&G) announced in a news release December 2 that the firm would no longer sell laundry detergents in Dade County, Florida. Dade County, like Erie County, New York, has enacted a total ban on phosphates in detergents. A spokesman for P&G told Environment that the company had also withdrawn from the Erie County market. Officials of P&G, one of the nation's leading detergent manufacturers, noted that they do not believe that a safe, acceptable, effective substitute for phosphates currently exists. However, because competitors of P&G have indicated a willingness to supply products that conform to Dade and Erie counties' new regulations, no shortage of laundry products in those areas should result.

PAY UP, CON ED. In a late December news release, the Hudson River Fishermen's Association, Inc. announced that it has a feasible means of easing New York State's current budget crisis. Richard J. Garrett, president of the fishermen's association, claims that a recently completed investigation by the U.S. Atomic Energy Commission reveals that the Consolidated Edison Company is responsible for killing five million fish at the company's Indian Point nuclear plant on the Hudson River. If the state collected the usual penalty of $27.50 per fish, the total would equal $137,500,000. Garrett points out that further investigation might reveal that as many as ten million fish had been killed by operations at Indian Point, thereby bringing a windfall of $275 million to the state. The

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fine of $27.50 per fish is standard in New York for the illegal killing or taking of any fish. Should Con Ed actually be fined the $137,500,000 or more, under New York state law the cost could not be passed along to the consumer, but would have to be absorbed by the company.

FEARS OF mercury fallout have, in part, caused a delay in the issuance of a construction permit for a proposed low-sulfur-coal-fired power plant in Minnesota. Northern States Power Company's proposed Sherburne plant is designed to burn approximately 20,000 tons of low-sulfur coal daily. A spokesman for the Minnesota Health Department told Environment that low-sulfur coal tested by his department measured from 0.05 to 0.1 part per million (ppm) mercury. (Some higher-sulfur coal averages as much as 0.5 ppm mercury.) If, when burned, all the mercury is liberated, as much as 1,500 pounds of mercury per year may be emitted by the Sherburne plant. The spokesman said he could make no estimation of what this might mean in terms of health effects on the population. Application for a construction permit for the Sherburne plant was made in July 1971. Ordinarily, permits are issued within 60 to 90 days. A spokesman for the Minnesota Air Pollution Control Board, though, said that as of mid-January the permit was still being delayed while the issues of sulfur dioxide emissions, degradation of the state's air, and mercury fallout are discussed.

POLYCHLORINATED biphenyls (PCBs), industrial chemicals that have recently been found to be widespread environmental contaminants, may be common in human tissue. According to Chemical and Engineering News (January 3), Dr. A. R. Yobs of the Environmental Protection Agency reported to a federally sponsored meeting on PCBs that analysis of nearly 600 samples of human tissue collected from seventeen states revealed that 33.6 percent of the samples contained more than one part per million (ppm) PCBs, and that a further 30.1 percent contained a detectable quantity of the chemical. At the same meeting, Dr. Harold A. Humiston of Michigan department of health chemistry laboratory found more than one ppm PCBs in 41 percent of the 80 human adipose (fat) tissue samples that he tested. The effect of PCBs on humans is not known.

CRIMINAL CHARGES were filed this past summer against Sanatkumar Kavi after Mr. Kavi objected to the spraying of DDT in his village in India. According to a letter written by Mr. Kavi, and forwarded to Environment, the charge was obstructing a public servant in the discharge of his duty. In India spraying houses with DDT is directed at eradicating malaria and is compulsory. The Indian government is assisted in its malaria eradication program by the World Health Organization. The case against Mr. Kavi, who believes that DDT is harmful to both nature and man, illustrates the philosophical, as well as scientific, complexities associated with the use of chemical pesticides.

THE GREAT RACE. Effective mass transit systems would not only reduce urban air pollution, but also would go a long way toward easing commuter traffic. Until such time as mass transit is available, one must make do. The first Invitational Commuter Race, held in San Francisco, pitted a bicycle against an auto and a streetcar. According to a report in Clear Creek (December), the commuter race, held during rush hour, was won easily by the bicyclist, who completed the course a full twelve minutes ahead of his nearest competitor, the streetcar rider. The auto finished last.

--Terri Aaronson

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