

## DDT Stopped, Suit Dropped

The Environmental Defense Fund (EDF) has dropped the lawsuit alleging that Montrose Chemical Corporation of California, the world's largest manufacturer of DDT, had discharged massive quantities of DDT into the Los Angeles sewage system, which connects to Santa Monica Bay and the Pacific Ocean. The suit, filed against Montrose in October 1970, was dismissed after Montrose installed equipment to prevent the discharge and disconnected its DDT manufacturing operations from the sewer lines.

The EDF's lawsuit came after scientists had noticed, for several years, a disparity between the DDT concentration in marine wildlife off Southern California and that found in other marine environments. Livers of fish from Santa Monica Bay were found to contain DDT concentrations of more than 1000 parts per million (ppm), while typically DDT concentrates in the livers of similar fish at a level of a few parts per million or less. In December 1969, Star-Kist Foods, Inc., voluntarily removed 4000 cases of its canned mackerel from the market after it was discovered that the fish contained DDT concentrations above the federal tolerance limit of 5 ppm. In December 1970, the Food and Drug Administration seized 8000 pounds of kingfish with DDT concentrations of 19 ppm. Earlier that year, an attempt to impound 1260 pounds of both kingfish and queenfish with a DDT content of 14 ppm failed when the fish were sold before the federal authorities could act.

### The Fate of the Brown Pelican

The EDF believes that Montrose is also responsible for the plight of the brown pelican. Although still a common sight in Southern California, the fish-eating brown pelican is facing extinction as a result of DDT contamination, EDF claims. Because of DDT-tainted tissues, the birds lay eggs with shells so thin that they break prematurely and therefore produce no young. Robert Risebrough, a pesticide specialist at the University of California, Berkeley, reports that in 1969 on Anacapa Island, the pelicans' nesting grounds, fewer than four pelicans were born out of 1000 nesting attempts. The nesting attempts were cut in half in 1970, producing only one young that survived. Risebrough hopes that the pelicans will resume reproduction when the discharge of DDT from Montrose has completely stopped.

Although it acknowledges that other businesses in the Los Angeles area could be the cause of DDT effluents in the waters, EDF says that these businesses—food packaging companies, food processors, and others—could not account for such an overwhelming amount of DDT. The County Sanitation District, also named as a defendant in the suit, recently removed 0.5 million pounds of sediment containing 5000 pounds of DDT from the sewage lines below the Montrose plant. Montrose asserts that it had begun to halt the discharge of DDT long before the EDF lawsuit, and that DDT effluents from the plant itself were down to less than 1 pound per day.

### EDF Satisfied with Compliance

On June 1, Montrose allowed EDF attorney Norman Rudman to inspect its plant. Rudman was satisfied that Montrose had complied with EDF's demands, and EDF then recommended the suit's dismissal.

Meanwhile, Montrose has developed a method of "recycling streams," where DDT, salt, and water wastes from its manufacturing processes can be made useful again. In addition, an EDF lawyer told *Science* that Montrose may prompt "a whole new lawsuit" by loading tank trucks with DDT that cannot be recycled and dumping it directly into landfills that are said to be situated on impregnable rocks, thereby preventing leakage. The question EDF and others are asking is how many years might elapse before erosion begins and the DDT escapes.

—EDWARD P. JONES

a plea to be rehired if the accelerator should resume operations, and another notes that almost every day someone returns just for a visit.

Since 1 July 1969, a total of 253 have departed, leaving a staff of only 42. Thirty of those who have left held administrative posts, 21 were maintenance staff, and the remaining 202 were operations personnel. Of the latter, 9 were physicists, 32 engineers, and the rest technicians. Except for two who recently underwent major surgery, none of the engineers are now unemployed, although a few experienced considerable delays in finding work. Six of the engineers have gone to other universities, 7 now have permanent positions at Princeton, and 17 have gone into private industry. Seven of the physicists have gone to other universities, and the other two are employed in industry. Three of the technicians, dismissed in March, are still unemployed.

R. J. Woodrow, associate treasurer at Princeton University, observed that it is difficult for a university to cut back on such service operations as grounds maintenance, purchasing, the cafeteria, and so forth, but he said that Princeton was able to absorb most of the administrative and clerical personnel. He stressed that the bigger the operation associated with a university, the more important that it stand apart on its own financial feet. He appeared unperturbed by the impact of the PPA closing on Princeton's finances, but others felt that the loss, at such a time, of a program with \$5 million annual operating costs could only hurt the university.

Some of the equipment useful at other facilities has already been shipped away, but the accelerator itself and its building remain behind, now the property of Princeton University. The storage area will be used by the university's plasma physics research group, but it is difficult to imagine what use could be made of the big machine itself if the current fund-raising campaign proves fruitless.

The impact of the closing on the physics department has been much less tangible. White speaks of a "very sharp downturn in graduate student and young faculty morale." But Marvin L. Goldberger, the department chairman, feels that the principal loss to Princeton will be in its ability to recruit young faculty in high energy physics. Even here, he believes that the closing of PPA