A. A. P. S. E. NEWSLETTER

AAPSE AAPSE AAPSE AAPSE AAPSE

Vol. 6, No. 1 September, 1970

(American Association of Professors in Sanitary Engineering)

MESSAGE FROM THE PRESIDENT

Greetings and best wishes! I trust all of you are ready for the new academic year -- both your University's and AAPSE's. This is to be a busy, busy year; and we need your input on a number of items. Here are some areas where we need you:

1. AAPSE has three meetings scheduled at Boston during the Water Pollution Control Federation Meeting as follows:

   Sunday, October 4, 1970 (10:30 a.m. - 11:00 p.m.) AAPSE BOARD MEETING. AAPSE members should come over and drop in to hear how things are going, discussed, and redirected.

   Tuesday, October 6, 1970 (8:00 a.m. - 9:30 a.m.) AAPSE SEMINAR. Richard Dague and Larry Canter will have an interesting session going for you.

   Tuesday, October 6, 1970 (8:00 p.m. - 10:00 p.m.) AAPSE ANNUAL MEETING. This meeting is for AAPSE members and will include opportunity for discussion of any topic on your high priority of interest. Gripes? Come and tell us. Sure, we'll have a speaker. Bob Snider of FWQA Training Grants Branch will fill us in on the latest changes in training grant and fellowship policies, money availability for training, and the progress on operator training.

   (The President will write each of you with the exact location of every event when it is fixed.)

2. This is our year to announce the AAPSE-ES Outstanding Educator Award. Announcement due at Boston!

3. The 1970 Workshop was intellectually a success -- but attendance was so-so. What should we shoot for to help our younger members at our 1971 Workshop scheduled on the West Coast? Date? Subject?

4. I have been active in Washington trying to promote our educational interests --including an appearance before the HEW-Labor subcommittee of the Appropriations Committee. You all got copies of our (AAPSE's) statement. About ten of you took supportive action. Where were the rest of you???

5. John O'Connor has really gotten a committee active on publishing an AAPSE LAB MANUAL of experiments to demonstrate principles and their application. We'd like to have your successful experiments represented. You should seek to learn more of this new activity.

6. The International Conference in San Francisco is over. Was it successful? Depends, I suppose, on who you talk to. Personally, the workshops there were the most worthwhile afternoons I have ever spent in discussion and evaluation of current topics. You missed something!

7. What's what with the new E.P.A.? Will the Bureau of Water Hygiene lose everything here, including its identity? Where should we seek to have water supply responsibilities?

(continued next page)

8. Where do you want us to head in areas of educational training and research policy? Let's listen to the preliminary reports and get your ideas to us.

9. I think each of you should be concerned about the campus situation this academic year particularly. If the universities are to thrive and continue to produce problem "solvers", we need to have a university, it must remain open, and we must be ready to work to this end. What can we, as individuals and as an educational organization, do in this regard? We must not just stand by.

10. Come to Boston; speak out!

PROCESS DESIGN CONFERENCE AT VANDERBILT

A seminar on "Process Design in Water Quality Engineering -- New Concepts and Developments," will be held November 9-13, 1970, at Vanderbilt University. This seminar will be devoted to design concepts and developed design problems and calculations in the areas of physical, chemical, and biological treatment and sludge handling and disposal. The format will include background lectures and example problems with detailed calculations. Discussion seminars on specific unit processes will be held. The registration fee for the seminar is $150, which includes the seminar notebook of problems, which will be mailed to all registrants in advance of the conference. For futher information, write Professor W. Wesley Eckenfelder, Jr., Box 6222 Station B, Vanderbilt University, Nashville, Tennessee, 37203.

ENVIRONMENTAL MANPOWER CONFERENCE

AAPSE was represented by John Austin at an environmental manpower conference sponsored by the Environmental Control Administration, USPHS, in Rockville, Md., on 9-10 September 1970. The purpose of this conference was to review and to evaluate a draft of an "Environmental Health Staffing Guide Manual" and a dictionary of Environmental Health Occupational Titles."

BENEFICIAL EFFECTS OF AIR POLLUTION ABATEMENT

Recent statistics compiled by two Pittsburgh economists, Dr. Lester B. Lave and Eugene P. Seskin of the Carnegie-Mellon School of Industrial Administration, indicate that if air pollution were cut by 50 percent in major cities: (a) a newborn baby would have an additional 3-5 years life expectancy; (b) deaths from lung cancer and in fact all lung disease would be cut by 25 percent; (c) death and disease from heart and blood vessel disorders might be cut by 10-15 percent; (d) all disease and death would be reduced by 4.5 percent yearly, and the annual saving to the nation would be at least $2 billion.

"We can put it more simply," said Lave in an interview with The Washington Post. "For the average middle-class American family living in an urban area, abating air pollution is the single most important thing we could do to improve health. If we could reduce air pollution by 50 percent, it would save nearly as much in money and life as if we found a complete cure for cancer."

SST POLLUTION STUDY

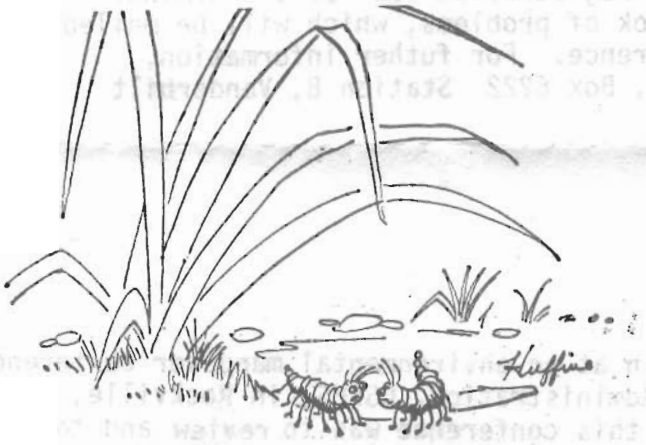
Rep. Henry S. Reuss of Wisconsin, leading congressional critic of the proposed supersonic transport (SST), charges that the Boeing Co. itself in a secret study predicts that regular operations by the giant aircraft would produce atmospheric changes that could alter the climate.

Boeing denies the existence of such a report.

Reuss maintains the study exists and adds that, despite its findings, Congress was told by the Department of Transportation—a strongly pro-SST agency—that there was no scientific support for suggestions that the SST would pollute the upper atmosphere.

Reuss made his charge on June 7. The House of Representatives already has approved the Department of Transportation Fiscal Year '71 budget, which contains funds for SST development, but the budget item faces a tougher fight in the Senate.

The study, according to Reuss, concludes that water vapor left in the air by a fleet of 100 SST's would cause cloud formations that could significantly decrease the earth's temperature. It also states that the vapor would destroy part of the ozone in the upper air, resulting in damage to the "shield" which protects the earth from ultraviolet radiation.
[from Environmental Action]



"Now they find out that DDT is harmfull"

"Fill it up with lethal!"

ENVIRONMENTAL LEGISLATION INVENTORY

The Environmental Policy Division of the Library of Congress' Legislative Reference Service has an inventory of the environmental legislation passed by the Congress since 1965. Free copies may be obtained by writing to the Legislative Reference Service, Library of Congress, Washington, D. C. 20540.

INDIAN SCIENTIST SEEKS FACULTY POSITION

A scientist from India seeks the opportunity to teach for several years in a U.S. sanitary engineering department. He received his Ph.D. in sanitary chemistry from the University of Bombay and the M.S. and Sc.D. degrees from M.I.T. For the past ten years, he has been responsible for organizing research on problems connected with water pollution control in India. If you desire further details, a copy of the vita is available from the AAPSE Newsletter Editor.

ENVIRONMENTAL MANAGEMENT

A new educational program in environmental management will be initiated this fall at the University of California, Irvine. Chancellor Daniel G. Aldrich, Jr., has announced the plan which is aimed at educating professionals who will be able to respond to the public demand for a cleaner environment. The program will combine courses in engineering, biological sciences, and social sciences. Students who complete the course will be eligible for a double major from two of the three schools involved. However, the student will simultaneously satisfy the graduation requirements of all three participating schools and may elect to do his graduate work in the third school, underscoring the interdisciplinary nature of the new program.

SYMONS JOINS MALCOLM PIRNIE

Malcolm Pirnie, Inc. Consulting Environmental Engineers, White Plains, N. Y., has announced that Dr. George E. Symons has joined the firm as Manager, Special Projects. In this capacity, he will be responsible for projects involving broad concepts of environmental problems.

Dr. Symons is a licensed professional engineer, a Diplomate of the American Academy of Environmental Engineers, Honorary Member of the American Water Works Association and of the Water Pollution Control Federation, a Fellow in ASCE and APHA and a member of AIChE, ACS, and NSPE. He is currently serving as a Director and a member of the Executive Committee of the American Water Works Association.

During the past six years Dr. Symons has been Editor of Water and Wastes Engineering. Prior to 1964, he had his own consulting office in Larchmont, N. Y.

SOLUTION TO MERCURY-IN-FISH PROBLEM

Chemist Perry Maxfield of the University of Colorado has passed on a solution to the mercury-in-fish problem that he learned of last summer from an old timer in Finland, where some lakes contain mercury. "If you have a fish you can't eat because it has quicksilver in it," the old Finn said, "the solution is simple. Since quicksilver is very heavy, all you need to do is take the fish by the tail and shake it very hard. Soon all of the quicksilver will be in the head. Then you can cut off the head and eat the rest of the fish."

REPORT ON 1970 A.A.P.S.E. WORKSHOP

The 1970 AAPSE Workshop was held at Brown's Lake Resort, Burlington, Wisconsin, June 23-26. Attendance was somewhat less than anticipated, although approximately 30 participants were present for the excellent program which was prepared by the committee. Wes Pipes, Northwestern University, is to be complimented for many hours of work in securing speakers and in obtaining written papers that are now assembled into the Workshop Proceedings.

The location and facilities, arranged by Ray Kipp, Marquette University, proved to be excellent. The social hour, on the evening preceeding the Workshop, was hosted by Rex Chainbelt, Inc., Milwaukee, and was most enjoyable. Good food, fine weather and the relaxing atmosphere at Brown's Lake added to the satisfying experience shared by those in attendance.

Professional consultants from many well-known offices participated in some excellent discussions and their presented papers and comments will undoubtedly influence our sanitary engineering educators. The Workshop Proceedings are bound in a loose leaf binder and are available until October 1, 1970 from Ray Kipp, Marquette University, 1515 W. Wisconsin Avenue, Milwaukee, Wisconsin 53233. The cost for each copy is $6.00. Please make your checks payable to AAPSE. After October 1, all material will be sent to the University of Texas and Workshop Proceedings will be available from the University of Texas.

RECYCLING

Reynolds Metals Company opened an aluminum can reclamation center in San Francisco. Reynolds will pay ten cents a pound for all aluminum cans and other aluminum scrap. Company spokesmen say its retrieval and recycling program has recovered 900,000 pounds of aluminum in the first seven months of its program to collect aluminum throwaways around the country. [from Conservation News]

RICHARD DICK RESIGNS FROM A.A.P.S.E. BOARD

Dr. Richard Dick, whose term as a Member of the AAPSE Board of Directors expires on December 31, 1970, has resigned effective September 1, 1970. Dr. Dick is spending this next year at Stevenage, England, on a sabbatical and does not feel he can contribute effectively as a Board Member from there. Dick has done yeoman service for AAPSE and we look forward to having him back on the Board in the future.

OIL PRESS COVERAGE

UPI reports that Sen. Clifford P. Hansen of Wyoming is worried that the oil and gas industries are receiving unfavorable press coverage. He suggested a few weeks ago that "oil and gas companies (should) use advertising expenditures to influence newspapers to present more favorable news about the industry."

Sen. Hansen is concerned that among too many Americans, "oil is a dirty word." [from Environmental Action]

OCEAN DUMPING

The mid-August furor over dumping several hundred tons of nerve gas off the Florida coast overlooked the fact that the United States has been using the oceans for years as a trash can for noxious wastes.

This fact was highlighted later that same month when the Navy dumped several tons of surplus TNT off the Maryland coast. Originally, it was planned to drop the explosive off the coast of New Jersey at the spot where mustard gas had been dumped three years before. When that fact became public knowledge the dumping site was shifted. Good thing, too, since ships five miles away felt the explosion when the TNT hit bottom.

But surplus military weapons and explosives aren't the only things the U.S. has been pouring into the sea at the rate of 48 million tons per year. Included in that ghastly disposal are sulfuric acid, arsenic, napthenates, cyanides, mercury and other heavy metals, pesticides, refuse---from municipal sewage to plastics and cannery wastes; radioactive wastes, chemical warfare agents, construction and demolition debris and various rejected or contaminated products---from foodstuffs to appliances.

The ocean off the East Coast and the Gulf of Mexico are dotted with dumping sites where the throw-away society has cast poisons and problems in the belief that out of sight is truly out of mind.

This attitude underwent brief revision last winter when it was discovered that the ocean off New York harbor where the city had been dumping its sludge was dead. Dead. Not dying; dead. Scientists studying the content of bottom sediment in the area were horrified. A bottom sample from one station included cellulose cigarette filter tips, band aids and aluminum foil. The same items have been found in the stomachs of fish. Oxygen in the water in the dumping area was found to be less than one part per million. A concentration of 2.5 ppm is usually considered essential for marine life. In fact, nothing live was found.

And even a clam with a snorkel would have to contend with excessive contrations of lead (151 ppm), copper (60 ppm) and chromium (40 ppm), not to mention everyone's favorite pesticide DDT (150 ppm). These figures were recorded at Station 59 in the dumping area---in the open ocean 10 miles south of Rockaway Inlet, 9 miles due east of Sandy Hook.

What is most disturbing about the extent and variety of dumping is that so little is yet known about the effect of sludge, chemicals, poisons, and junk on the marine environment. There is some evidence that materials break down very slowly on the ocean bottom. There is considerable evidence that marine organisms can concentrate pesticides, poisons or radioactive wastes in their systems to a point that can kill a man if he eats them. But ignorance of effects and conditions is so great that caution, particularly in light of such evidence as that found at Station 59, ought to be the rule at the moment. [from Conservation News]

FACULTY NEWS ITEMS

Dr. Corbin McGriff has joined the staff of Mississippi State University as Assistant Professor of Sanitary Engineering.

Dr. Yousef Yousef is joining the Florida Technological University faculty in Orlando. He is from the University of Texas.

Dr. Robert L. Johnson, Assistant Professor of Civil Engineering at Iowa State University, has resigned effective August 1, 1970, to accept a similar position at Lehigh University. Bob completed his Ph.D. in sanitary engineering at Iowa State in December, 1969.

CORPS OF ENGINEERS ANNOUNCES NEW PERMIT REQUIREMENT

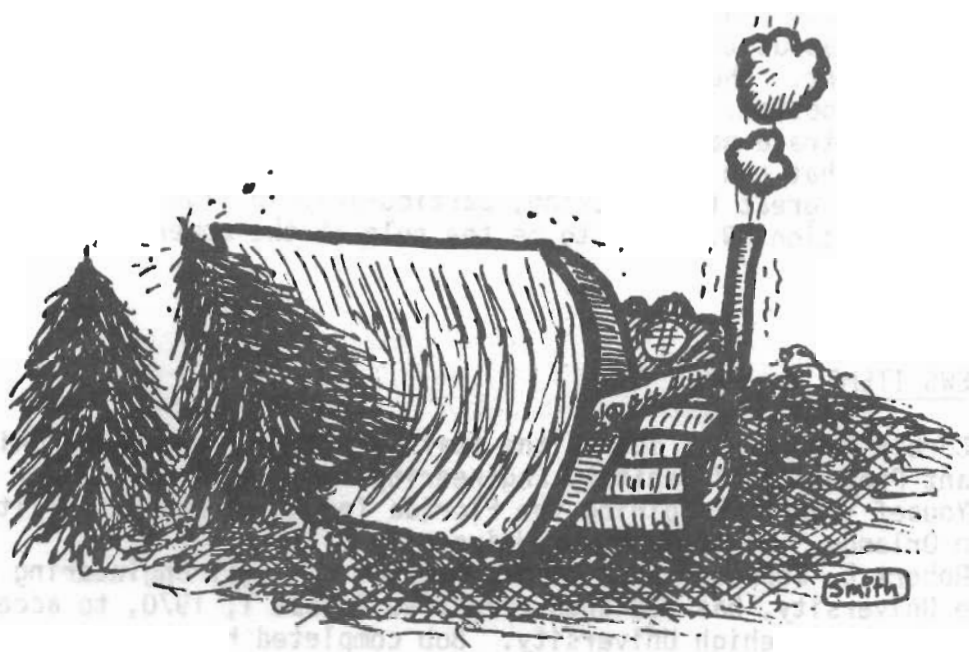
The Corps of Engineers has announced new permit requirements under the Refuse Act (33 USC 407) concerning all discharges into navigable waters. Permits will be required for all industrial discharges into navigable waters and their tributaries. New permits will be required where existing permits were granted without adequate consideration of the quality of the effluent. Permits will also be required for current discharges into navigable waters where no permits have been granted.

Applicants for new permits are now required to identify the character of the effluent and to furnish pertinent data such as chemical content, water temperature differentials, toxins, sewage, quantity of solids involved and the amount and frequency of discharge.

The Corps' revised requirements are in compliance with the Environmental Policy Act of 1969 which requires agencies to consider environmental impact in the administration of public laws, and with the Water Quality Improvement Act of 1970 which requires agencies to consider environmental impact in the administration of public laws, and with the Water Quality Improvement Act of 1970 which requires applicants for federal permits to file a certification from the appropriate state that the discharge "will not violate applicable water quality standards." Under the revised procedures, the effects of discharges on water quality will be considered in processing the permit.

While permits will be required for all future discharges into navigable waters and their tributaries, the Corps of Engineers will initially concentrate on major sources of industrial pollution not covered by existing permits. The Corps hopes that through widespread knowledge of its new permit requirements including state certification, it will, along with other federal, state and local anti-pollution activities, encourage industries to accelerate their own anti-pollution efforts.

All actions under the Refuse Act having Water Quality implications are being closely coordinated with the Federal Water Quality Administration to insure unity in the federal water antipollution program.



1971 A.A.P.S.E. WORKSHOP

"Treatment Plant Instrumentation And Automation" has been chosen as the topic for the next workshop to be held at Newport Beach, California, 21-23 June 1971. The Workshop Committee plans to emphasize the teaching aspects of instrumentations and automation including actual design and operation of certain prototype instrumentation systems. The program is now being finalized and any suggestions should be mailed now to the Workshop Chairman, Dr. Jan Scherfig, School of Engineering, University of California, Irvine, California 92664.

STUMM TO LEAVE HARVARD

After sixteen years in the United States, Werner Stumm will leave Harvard University by the end of September. He has been appointed a Professor at the Swiss Federal Institute of Technology and a Director of the Swiss National Laboratory for Water Resources and Water Pollution Control. [from Aero & Aquafacs]

ECOLOGY SHOULD BE CONSIDERED

A special July 20, 1970, dispatch to THE NEW YORK TIMES by Roy Reed, marks a most significant court decision in the history of conservation. Reed reported that the United States Court of Appeals for the Fifth Circuit (at New Orleans) has ruled that ecology should be considered along with other factors in the filling and dredging of coastal wetlands. Thus, the Court overturned a contrary earlier view of a federal district judge whose decision was being appealed by the federal government. The Court held that the Army Corps of Engineers had acted properly in 1967 in refusing to grant a permit to allow two Florida landowners to fill 11 acres of Boca Ciega Bay (near St. Petersburg) for a trailer park. Implementing an interdepartmental agreement with the Department of Interior, the Engineers had acted on the grounds the work would harm fish and wildlife in the bay and be inimical to the public interest.

Referring to the Engineers and other responsible authorities, the court said:

"The establishment was entitled, if not required to consider ecological factors and, being persuaded by them, to deny that which might have been granted routinely 5, 10, or 15 years ago before man's explosive increase made all, including Congress, aware of civilization's potential destruction from breathing its own polluted air and drinking its own infected water and the immeasurable loss from a Silent-Spring-like disturbance of nature's economy."

This is an extremely important precedent and will undoubtedly provide the cornerstone for the Corps' developing effort to incorporate ecological capabilities and considerations into their program. [from SFI Bulletin]

LOST

Clean, healthy air in the general vicinity of the United States. Finder may keep any cash, promotions or retirements realized through destruction of same. Please return immediately. No questions asked. [from Conservation News]