

183 Water Permits Issued by States

The first permits to discharge treated waste effluents into waterways under the Federal Water Pollution Control Act Amendments of 1972 have been issued to 183 industries in 15 States and American Samoa, according to Albert C. Printz, director of the Office of Permit Programs.

The permits require the holders to apply the "best practicable" pollution control technology by July 1, 1977, or treat their effluents to comply with the quality standards of the receiving water, whichever is more stringent. Each permit cleanup pro-

gram includes a step-by-step time schedule.

The permits were issued by the States under an interim authority granted by EPA, and all were preceded by public notice and hearings.

The State of Washington issued the most permits, 31, followed by Oregon, 29; California, 23; Georgia, 19; Massachusetts, 13; South Carolina, 11; Mississippi, 10; Missouri, 9; Indiana, 7; Iowa, Minnesota, and Ohio, 6 each; Michigan, 5; Connecticut, 4; and Hawaii and Samoa, 2 each.

The interim authority expired on

March 19. Two States, Virginia and Wisconsin, issued no permits under their temporary authority, Printz reported.

The issuing authority is now back in the Federal Agency's hands, where it will stay until the assignment of permanent issuing authority to State water pollution control agencies.

Regulations for the National Pollutant Discharge Elimination System (NPDES) have been proposed and published by EPA and commented on by interested parties and the public. Their promulgation is expected some time this month.

California Applies

California was the first State to make formal application to EPA for permanent issuing authority, and a public hearing was held by EPA in Sacramento March 26. Murray Stein, head of EPA's Water Enforcement Proceedings Division, was chairman of the hearing, and the panelists included Richard O'Connell of EPA's Region X Office and Roy E. Dodson of the California State Water Resources Control Board.

Although the 183 permits were issued under an interim arrangement, each of them will remain valid unless there is a substantial change in the kind and amount of waste water discharged or a failure on the part of the permit holder to live up to his obligations, Printz said. The holders will not have to re-apply until their permits expire.

The law also provides that industries, municipalities, and agricul-

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EPA CLASS IN KOREA—Sixteen Army men nearing discharge are taking a 12-week course in waste water treatment plant operation at Camp Casey, Dongducheon, Korea, and will qualify for immediate employment or further training when they leave the Army. Three civilians at left, are Dr. Ronald Layton, president of the Water and Wastewater Technical School, Neosho, Mo., contractor for the courses; and David Schrader and Daniel D. Morgan of EPA's Manpower Development Office. Civilians at right, are Howard Sanford and John Pettitway, instructors. Similar classes are being held elsewhere in Korea, the Philippines, Hawaii, and Europe.

Lillian D. Regelson in Charge Of Water Planning, Standards

Mrs. Lillian D. Regelson, a specialist in systems analysis and management planning, has been named to head EPA's Office of Water Planning and Standards.

As one of four deputy assistant administrators under Robert L. Sansom, assistant administrator for air and water programs, Mrs. Regelson is the first woman in EPA to hold a Civil Service "supergrade" position (GS-16 and above). Her post, a GS-17, had been vacant since it was created last fall in reorganization of the Office of Air and Water Programs.

She will oversee the work of three divisions: Effluent Guidelines, Allen Cywin, director; Monitoring and Data Support, George Wirth, acting director; and Water Planning, Mark A. Pisano, director.

Mrs. Regelson comes to EPA from the Office of Economic Opportunity, where, as acting director of planning, research, and evaluation, she was responsible for experiments and demonstrations that explored the relationship between social problems and poverty. She had previously held other posts at OEO, including that of chief of the Evaluation Division and program analyst. She has also held technical and managerial positions in California at the Naval Weapons Center, China Lake, and with Hughes Aircraft Co., Culver City.

Mrs. Regelson is 45 years old and a native of New York City. She was graduated cum laude from Hunter College, New York, with a B.S. in mathematics. She earned a master's degree in mathematics at UCLA and has taken additional graduate courses at several universities in engineering systems analysis, mathematical modeling, and management.

She lives in Kensington, Md., with her husband, Ephraim, an engineer employed by the Navy Department, and her son Kenneth, 17. They also have two older daughters.



Lillian D. Regelson

J. F. SCEARCE CONSULTANT ON LABOR

James F. Scarce has been named to the new post of consultant on labor matters to EPA Administrator William D. Ruckelshaus.

Scarce will act as EPA's liaison with labor organizations, communicating the Agency's role and programs as they affect labor and giving EPA a better appreciation of the problems labor may encounter as a result of environmental policies.

Ruckelshaus said Scarce's appointment culminated "an extended effort to select . . . an individual with the qualifications necessary to act as liaison with officials of American labor organizations on the actions of EPA."

For the last three years Scarce has been with the Labor Department, serving as special assistant to W. J. Usery Jr., former assistant secretary. He has experience in the aerospace and construction industries, both as a craftsman and as a manager of industrial relations. During the construction of the Ken-

ENFORCEMENT POST GOES TO WILSON

Richard D. Wilson has been appointed director of EPA's Stationary Source Enforcement Division, succeeding William Megonnell, who has retired from Federal service.

Wilson, 29, will be responsible for enforcement of the Clean Air Act and of the Noise Control Act as they apply to industrial and manufacturing plants, power generating stations, incinerators, and all other fixed sources of air pollution and noise.

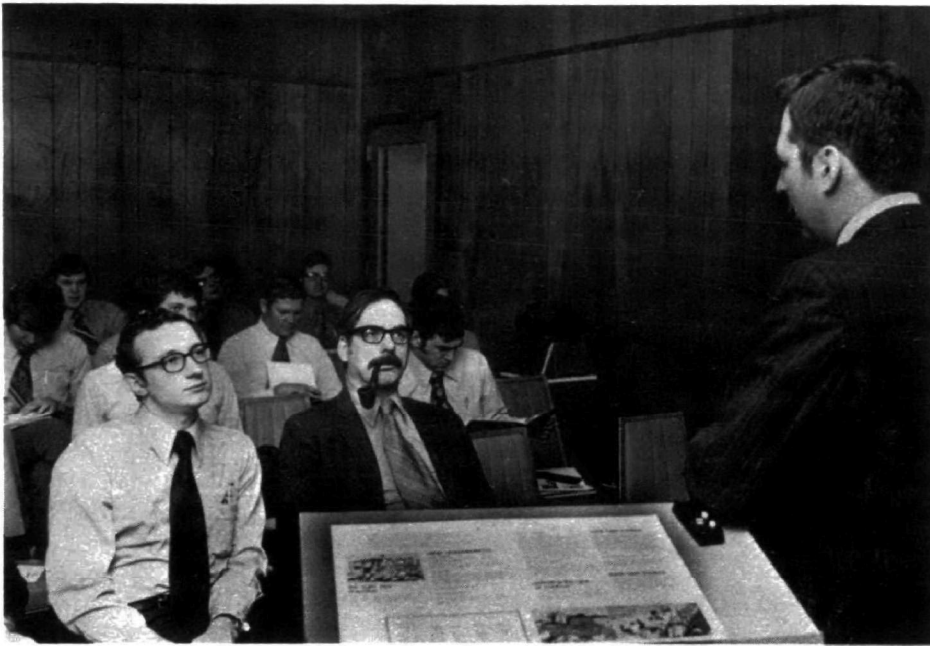
Wilson will report to George Allen, deputy assistant administrator for general enforcement, in the Office of Enforcement and General Counsel.

He has been a special assistant to Allen since the Agency was founded in December, 1970, gaining extensive experience in enforcement actions relating to air pollution control, pesticides use, solid waste management, radiation control, and noise control, as well as enforcement of air pollution regulations. Before that he worked in the National Air Pollution Control Administration as an economic analyst and later as a member of the standards and compliance staff.

Wilson holds a B.S. in electrical engineering from Lafayette College, Easton, Pa., and an M.B.A. from the Wharton School of the University of Pennsylvania. He lives in Arlington, Va., with his wife, the former Maria-Liisa Koskinen, of Pori, Finland.

nedy Space Center in Florida, Scarce was a labor relations official with NASA.

Scarce is 40 years old and a native of High Point, N.C. He holds a B.S. degree from the University of North Carolina and an M.S. from Florida State University. He is a member of the International Brotherhood of Electrical Workers.



LANDFILL SEMINAR—Engineers in the Office of Solid Waste Management Programs heard James L. Mueller of the Caterpillar Tractor Company discuss types of heavy equipment for landfill operations at a recent seminar in Cincinnati. The meeting was one of a series by which EPA specialists try to keep abreast of waste disposal technology. Mueller, who recently visited European landfill sites, said American practices in solid waste handling were generally ahead of those employed abroad.

Progress and Problems Noted On Nation's Fourth Earth Day

Since the first Earth Day, only three years ago, the Nation has made "substantial progress, much more than any of us could reasonably have anticipated," said EPA Administrator William Ruckelshaus in a recent statement hailing the 1973 Earth Day observance on April 12.

"Three years ago environmental activists were but a handful. They were ardent, but not expert; and not really familiar with the methods of reform in a democratic society," he said. "Today there are an estimated 3,000 volunteer environmental organizations in the country, and quite a few of them have acquired real expertise.

"In the coming years we are going to see a lot more action by environmental reform groups in community programs. Local initiative has already scored significant achievements, ranging from restored lakes

and rivers to setting up environmental curricula in schools, from air pollution monitoring to the creation of parks.

"Where some industrialists complain, others go to work. A major chemical company reports its new pollution controls are saving millions of dollars annually and should have been installed long ago as sound business practice. The paper manufacturer doing the most in pollution abatement also leads its industry in earnings growth per share. Wastes once flushed into rivers or hauled to dumps are being turned into commercial products.

"Not every environmental investment will make a direct return, but there are enough positive examples to show that environmental improvements need not be automatically regarded as 'costs without benefits.'

"I am not suggesting that we are

MEETING WILL WEIGH NOISE AND HEALTH

Several specialists from EPA are planning to attend the International Congress on Noise as a Public Health Problem in Dubrovnik, Yugoslavia, May 13-18. The Congress is being sponsored by EPA, the American Speech and Hearing Association, and the Yugoslav Medical Association.

EPA participants will include Dr. Alvin Meyer and Dr. Simone Yaniv of the Noise Abatement and Control Office, and Dr. Dixon Ward, a University of Minnesota professor who is an EPA consultant on noise problems.

About 75 of the world's leading authorities on the health effects of noise will review the state of knowledge in the field and report on new developments in noise research. About 500 attendees from 20 countries are anticipated.

Dr. Meyer's office is planning to use information from the Congress in the preparation of a criteria document on the health effects of noise required by the Noise Control Act of 1972. This document, due in July, will assist EPA in drawing up noise emission standards for noise-emitting products in interstate commerce.

At the same time EPA will be gathering information for an Environmental Noise Report, also required by the Act. This report, due to be published in October, will discuss the levels of environmental noise "requisite to protect the public health and welfare with an adequate margin of safety" in certain defined areas.

Dr. Grujica Zarkovic, president of the Yugoslav Medical Association, is chairman of the Congress, and Dr. Ward is chairman of the program committee.

anywhere near out of the woods. Far from it. What remains to be done is much greater than what's been accomplished so far. But the trend is unmistakable."

Stress Lab Held Key to Better Health

Regular exercising at EPA's new "Stress Lab" is helping about 150 employees at the Agency's Washington headquarters to feel better, lose weight, and forestall heart attacks.

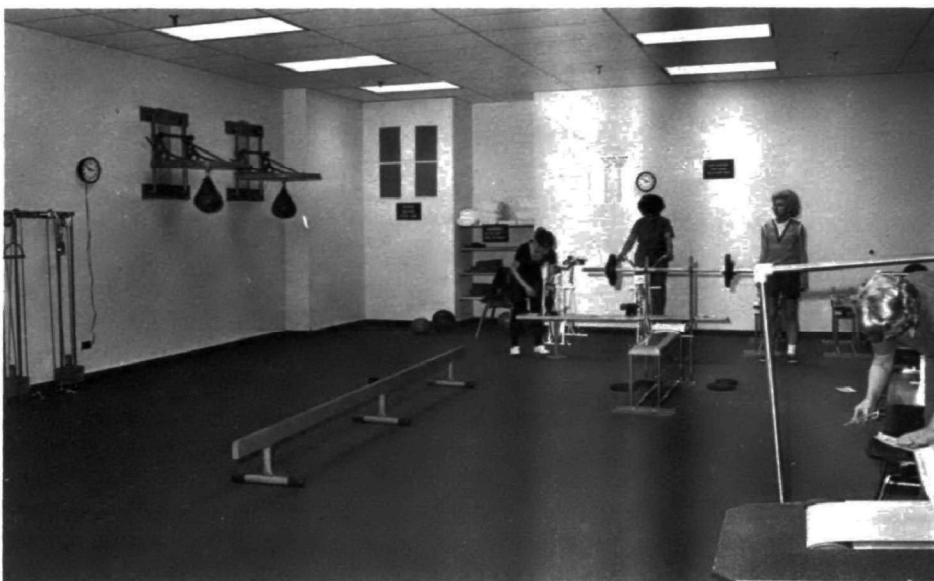
The official name is the Physical Fitness Laboratory, but users call it the Stress Lab because its exercise program is designed to stress each participant to healthy limits that are fitted to his or her individual needs.

The small, carpeted, windowless private gymnasium is on the second floor of the Waterside Mall Building, a step away from the EPA library. It is operated under contract by National Health Services, Inc., a New York firm that also operates EPA's headquarters health unit and clinic and a number of similar physical fitness programs for other Federal agencies and large business firms.

Coach and Trainer

Mike Jordan of NHS is the full-time manager of the lab. He acts as the genial coach, trainer, bookkeeper, and traffic cop for a varied clientele of more than 100 men and more than 40 women, who come in at all hours of the day, according to their work schedules.

For two hours each day the lab is reserved for women, to avoid



Equipment in the Physical Fitness Laboratory provides for 11 different exercises in succession, with their difficulties calibrated to individual needs.

problems with the dressing areas, showers, and sauna bath.

From 8 to 4:30 each day one can find green-suited EPA-ers pulling on rowing machines, pedaling wheel-less bikes, lifting weights, and counting their pulse beats.

"Each participant," says Jordan, "has a round of exercises to follow, selected for him. Each exercise station is designed to bring you smoothly up to the 'healthy sweat' stage. But this is not left to chance or personal judgment. You keep track of your pulse rate, and when

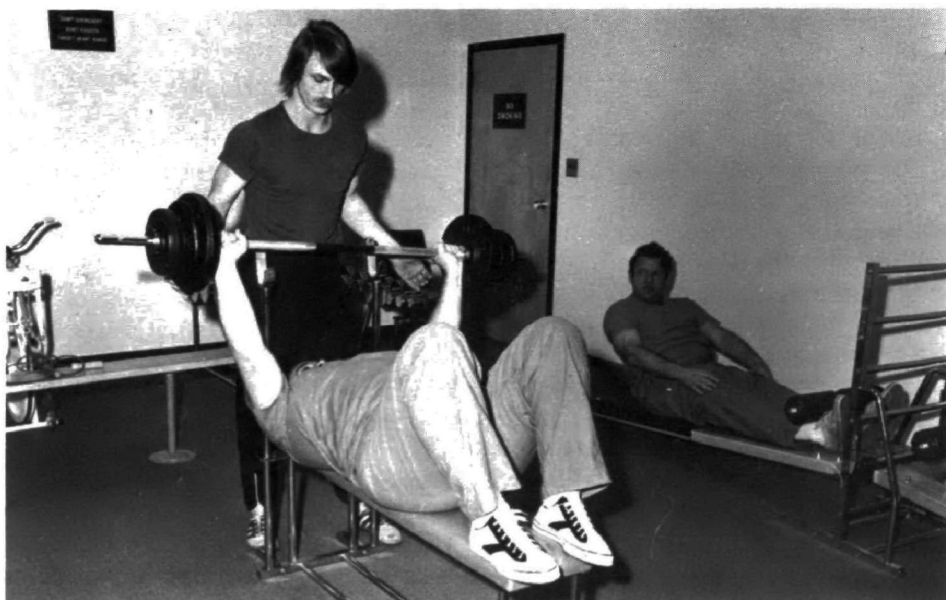
you get to 85 percent of the maximum for your age and weight, you stop. You rest or taper off on a non-stressing exercise, and then you try the next stage. The sequence is designed to stress all the major muscle groups in turn, without producing undue fatigue."

Improvements in wind, endurance, and general health usually show up in a few weeks, and the "load" at each exercise station can be increased without exceeding the 85 percent heart-rate limit. "Then the pounds begin to go, for the clients that need to lose weight," says Jordan.

Watching Hearts

"Our program is aimed at those who have, or might develop, cardiovascular problems, and we watch these aspects very closely. We have an electrocardiograph machine right in the lab, which I can read, and there's a doctor on call if anything unusual turns up on the EKG. Everyone has an EKG at the start of his participation, and everyone gets another reading every six months."

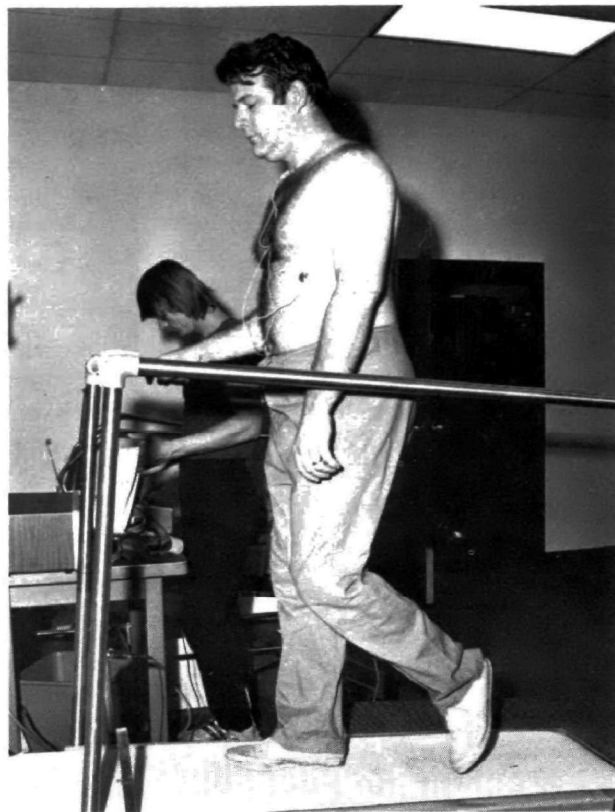
Participation is entirely voluntary, but is limited to employees with a need for the service as well as desire for it. This need is determined by the Stress Lab contractor under



Mike Jordan helps a weight lifter while Harvey Pippen does sit-ups.



Lola Bradley pauses after pedaling a bicycle device that can be adjusted over a wide range of muscle-load settings.



Harvey Phippen walks a treadmill while Mike Jordan, background, records his electrocardiogram.

guidelines set up by EPA's Employee Relations Office. These include such factors as the employee's age and health history, and the work he or she does. All must have their supervisor's approval and a physical exam satisfactory to the NHS. All must agree to follow the exercise regimen set up for them.

Jordan is proud of the Stress Lab's facilities. "We have about \$12,000 worth of equipment here," he says, "much more advanced and convenient than the equipment we had at our first Stress Lab at NASA. All of these machines can be quickly adjusted to different levels of difficulty or 'load'. This saves time for

everyone. A guy or gal can move through all 11 stations, shower, and get dressed in about 40 minutes."

This month Jordan has inaugurated an outdoor program for joggers at nearby Fort McNair along the Potomac River, over courses that are 1 and 2½ miles long.

'It's Not Boring'

"Jogging is a nice change for those who find indoor exercise confining," says Jordan, "but many people tell me they are surprised to find how much fun it is to exercise in the lab. They don't want to give it up. It's not boring at all to compete against yourself."

"The best thing about the lab for the people who use it is their tangible advancement in health and vigor. The best thing for the Agency is the intangible value of better work from healthy employees, and longer working lives."

"If we prevent half a dozen from keeling over with heart attacks, it will save EPA many times the cost of maintaining the lab."



Joe Kirby works on one of the Stress Lab's two rowing machines.

—photos by Ernest Buccci

EPA Air and Water Teams Visit Russia

More than a dozen air- and water-pollution experts from EPA and several other Federal agencies traveled to the Soviet Union last month to start the working sessions of a series of joint cooperative projects in the field of environmental protection.

They included a ten-man team of air-pollution experts, headed by Richard Harrington and Kay H. Jones of EPA, who spent two weeks conferring and traveling in the Soviet Union, and a seven-man team of water-pollution specialists, headed by John Buckley, deputy director of the Office of Research and Monitoring, who spent a week in Moscow.

En route home, some of the air-pollution team stopped off in Romania to confer with Romanian industry officials on American experience with flue gas scrubbing techniques that might be applicable to the fertilizer industry.

Mercury in Spain

And early this month a five-man EPA team visited Almaden, Spain, to consider setting up a joint study of mercury in the environment. Almaden, southwest of Madrid, is the site of the largest mercury mine in the world, and the area's soil, water, and air are believed to carry the heaviest known concentrations of this poisonous metal.

The air-pollution team visited a variety of industrial plants and utilities in Semibratovo, Leningrad, and Moscow, and a tractor factory in Vladimir. The group was made up of two sections, one concerned with stationary sources of air pollution and the other with mobile sources (vehicles). The stationary source group, headed by Harrington, included T. Kelly Janes, NERC-RTP, Paul W. Spaite, EPA consultant, and A. V. Slack, a gas emissions specialist of the Tennessee Valley Authority. The mobile source group was headed by Dr. Jones and included Ralph C. Stahman, automotive test specialist for EPA; John H. Ludwig, consultant, and Martin

Convisser, Department of Transportation. David H. Strother, Office of International Activities, and Henry H. Janin of the Council on Environmental Quality also made the trip.

The water pollution team spent all their time in Moscow, meeting with their Soviet counterparts and setting up schedules and dates for future visits and exchanges and organizing joint working projects. In addition to Dr. Buckley, the group included Dr. Donald I. Mount, director of the National Water Quality Laboratory in Duluth, Minn.; Mark Pisano and Kenneth Johnson, Office of Air and Water Programs; Arnold Joseph, Office of Research and Monitoring; William H. Mansfield, Office of International Activi-

JOINT RESEARCH WITH INDIA GETS UNDER WAY

Joint programs of environmental research with India were the subject of a week-long meeting in New Delhi early this month between two EPA officials and representatives of the Indian government.

Dr. A. F. Bartsch, director of the NERC-Corvallis, and Thomas J. LePine of the Office of International Activities represented the Agency at the meetings which ended April 6.

The cooperative projects, launched a year ago, involve United States support of research work by Indian scientists on problems of mutual interest to both countries. Special foreign currency funds—United States credits in rupees—are used to underwrite the work, so there is no drain on EPA's budget.

"Use of these special funds for cooperative research is in keeping with this country's efforts to achieve world peace and understanding," Dr. Bartsch said, "and it gives recognition to the fact that the preservation of the environment is a task which must be shared by all nations."

ties; and Roger Strelow, Council on Environmental Quality.

Harrington, Slack, and Strother did not return directly to the United States when the team's Soviet visit ended. They flew to Bucharest, Romania, to confer with IPRAN, the Romanian state enterprise for inorganic chemicals and fertilizer, for discussion of stack gas desulfurization in relation to fertilizer production.

The EPA experts' visit to Spain was at the request of the Spanish Ministry of Health. Led by Dr. Herbert Wiser, Office of Research and Monitoring, the group conferred with Spanish health officials, mining engineers, and representatives of the Universities of Madrid and Barcelona on mercury problems. Mercury has been mined at Almaden since Roman times, and the area probably has the world's highest levels of environmental mercury. The group brought back extensive samples of soil, air, and water for analysis, with a view to possibly setting up a joint, two-nation study of the environmental mercury problem with the support of the National Science Foundation.

Accompanying Dr. Wise were Dr. Anthony Collucci, Dr. Carl Hayes, and Dr. David Tingey, NERC-RTP; and Dr. William Brungs of EPA's Duluth laboratory.

Inside EPA, published monthly for all employees of the U.S. Environmental Protection Agency, welcomes contributed articles, photos, and letters of general interest.

Such contributions will be printed and credited, but they may be edited to fit space limits.

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STATES ISSUE FIRST PERMITS FOR EFFLUENTS

(Continued from page 1)

tural operations that have applied for discharge permits under the Refuse Act of 1899 will not have to re-apply. About 23,000 Refuse Act applications were received by the Army Corps of Engineers and EPA before a court ruling halted the processing and the new law supervised: All these applications (unless incomplete or otherwise deficient) will be deemed valid under the new regulations.

Swift Action Expected

EPA water enforcement officials both in headquarters and in the regional offices have been working hard on this backlog of applications, Printz said. This processing work has been under way for a year and a half. In many cases the required public notice has been given, hearings held, and technical determinations made. Issuance of the actual permits is expected to be swift once the final regulations are adopted.

After final approval, State water pollution control bodies will issue the permits and administer and enforce their provisions, following federally established guidelines. But EPA will retain issuing authority in States that do not meet the Act's requirements for necessary procedures and authorities, technical expertise, adequate manpower, and enforcement provisions. This means that State legislative action will be needed in most cases before EPA will be able to turn over the permit granting function to State authorities.

All cities, industries, business and commercial establishments, and farming and fish-farming enterprises that now discharge into lakes and rivers (and that have not already filed a Refuse Act application) are required by the law to apply for NPDES permits by April 16.

Forms are available at EPA Regional Offices for small cities (un-

EPA News Release Prompts Some Wry, Poetic Questions

The following poem was written by a graduate student at American University, Washington, D.C., in a class on Industrial Pollution Abatement Potentials taught by Richard P. Nalesnik of EPA's Office of Water Programs Operations.

Nalesnik asked his class to write a one-page critique of an EPA report: Automobile Emis-

sion Control, the State of the Art, released to the press Feb. 20. H. Clifford Freund, a bacteriologist who works in the Office of the Chief of Naval Operations, wrote his critique in verse.

Says Nalesnik: "I thought others in the Agency would get a chuckle out of it, and it shows how hard all of us must work to make technical reports clear to the public."

THE STATE OF THE ART

Oh, EPA, you've done it this time
With a release that was meant to enlighten.
After reading it through a layman's confusion,
I could only serve to heighten.
A layman, of course, is the other guy,
And I'm an expert of sorts,
But even I, with my eagle eye,
Don't follow some of your thoughts.
Take paragraph 2 of the "team concludes"
(Page 5 on my copy),
The averaging technique you talk about,
My gosh, that sounds kind of sloppy.
What if my car is the worst off the line,
And out there polluting like hell?
At a time like that, I really don't care
If you tell me the average is swell.
And what's a family of engines I ask.
Who's father, sister and brother?
Is the relationship based on power or size?
Or maybe, a common mother?
Then there's this great system you mention,
That's better than all the rest.
A supplier makes it—but what's the name,
Of this thing that's passed the test?
Now don't get me wrong, EPA,
I'm all for cleaner air,
But please make it easier for me to see,
Just how we're getting there.

der 10,000 population), manufacturing plants and mines, and commercial establishments including vessels. Forms will soon be available for agriculture and fish-farming enterprises. Cities over 10,000 and

most large operations in the other categories will be required to supply additional information and analytical data on their effluents, forms for this purpose will be issued as soon as possible.

Fast Action by Field Center Helps Save Six-Year-Old Boy

Fast action by EPA's National Field Investigations Center at Denver last month probably helped save a six-year-old boy from death or permanent disability from pesticide poisoning.

The boy, who lived on a farm near Grand Junction, Colo., had collapsed in a coma and was rushed to Colorado General Hospital in Denver for diagnosis and treatment. Poisoning was suspected because the boy had been playing with a container holding an unidentified liquid, which had spilled on his arms and legs. But officials of the State Health Department's Pesticide Study Project in Greeley were unable to tell what kind of liquid it was; the container label was obliterated.

Then the State officials learned that EPA had a gas chromatograph-mass spectrometer at its NFI center in Denver and asked for help in analyzing the suspected poison.

50-Minute Task

EPA chemists Roger Tindle, Virgil Warren, and Harvey Boyle set aside their normal work and had the instrument ready when the sample was brought to them at 2:30 p.m. on Friday, March 16. Fifty minutes later they had proof that the liquid was parathion, an exceedingly poisonous pesticide. During this time they not only carried out the analysis but double-checked it by matching the sample's spectrometer "peaks" with the standard parathion profile in the National Institute of Health's computer file.

This assurance helped the doctors determine their course of treatment. A week later the boy was out of intensive care, and on April 4 he was able to be sent home, still sick, but on his way to recovery.

Thomas P. Gallagher Jr., director of the Denver NFI Center, said the incident was a good example of the Center's quick-response capability.

The gas chromatograph-mass

spectrometer system is a sophisticated and powerful tool for detecting and identifying literally millions of different compounds, even if they are present in infinitesimal quantities. Compounds present in the sample are first separated by the chromatograph and then each is analyzed in turn by the spectrometer, which uses powerful electric and magnetic fields to make a distinctive "fingerprint" of the compound according to the masses of the atoms contained in it.

The instrument is normally used at the Center to identify pollutants in water, both organic and inorganic, to back up EPA's enforcement functions.

Battery Vehicles Approved For Possible U.S. Purchase

Four types of battery-powered vehicles manufactured by a Pennsylvania firm have been designated "low emission vehicles" by EPA under a program authorized by the Clean Air Act Amendments of 1970 to stimulate development of non-polluting cars and trucks.

Two small delivery vans and two small buses built by the Batronic Truck Corporation, Boyertown, Pa., were approved by EPA Administrator William Ruckelshaus on April 13. They will now be judged by a Low Emission Vehicle Certification Board to determine if they are suitable substitutes for any class of vehicles being purchased by Federal agencies.

If they win such certification, the battery-powered vehicles may be bought by Federal agencies at premium prices: up to 150 percent of the cost of the least expensive normal vehicle for which they are a substitute, and up to 200 percent if the Board designates them "inherently" non-polluting, that is, if their emission controls are inherent in the power plant design and not the result of add-on devices. Ruckelshaus

Washington Staff Forms VFW Post

A new post of the Veterans of Foreign Wars has been organized by a group of EPA employees in the Washington, D.C., area.

Known as EPA Post 127, the group meets on the fourth Friday of each month and will welcome all eligible Agency employees as members, according to Post Commander Philip P. Marra of the Water Programs Office.

Other elected officers include John Wenger, senior vice commander and membership chairman; Roger Brittingham, junior vice commander; Morris Blumenfeld, quartermaster; Sheldon Rothman, Judge advocate; Calvin Smith, surgeon; and Ray April, Mervin Mann, and John Sorge, trustees.

haus has recommended such a designation for the Batronic vans and buses.

The Board has 180 days within which to make its decision.

The Batronic vehicles include a merchandiser van capable of carrying 2,500 pounds of cargo; a suburban bus carrying one driver and 11 passengers; a transit bus carrying one driver, 15 passengers, and 10 standees; and a bakery van carrying 3,200 pounds of cargo.

In making the low emission vehicle determination, Ruckelshaus considered only the emissions from the vehicles themselves. The Clean Air Act does not authorize him to consider pollutant emissions from the electricity generating plants which provide energy for the vehicles' batteries.

Persons who wish to comment on the suitability for purchase of the vehicles by the Federal Government may submit comments in quadruplicate before May 13 to the Office of Mobile Source Air Pollution Control, Office of Air and Water Programs, EPA, Washington, D.C., 20460.