

New Era Will Be Characterized By Tighter Pollution Control

By ALLEN LONG
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(Last in a series on
Air Pollution)

We are witnessing the dawn of a new era. It will be characterized by tighter controls over air and water pollution. The new era is slowly emerging from the laboratories of scientists and engineers with new advances in equipment for controlling pollutants.

The need for such controls is apparent: Our present population of 177,000,000 is expected to reach 220,000,000 in 10 years. Our gross national product is expected to climb from \$450 billion to \$765 billion in this same period. Today, expenditures for research run about \$12 billion; by then research expenditures should hit about \$30.6 billion.

All this adds up to new and more exciting consumer products—and strange, new types of pollutants in our air and water. Considering this growth, 180 cities of 50,000 population or more already have or can expect to have shortly, enough of an air pollution problem to warrant year-round attention by full-time personnel.

Pollution Problems
Nor is air pollution the bane only of large cities. An estimated total of 10,000 communities in the U.S. already have air pollution problems. Many of them are small, one-industry towns where, say, a lumber mill or a cosmetic plant is the only industry.

Phoenix, Ariz., exemplifies the alert city looking toward the dawn of a new era. Phoenix expects a greater concentration of industry in the years ahead. It already is establishing zoning laws on the theory that advance planning is less costly than hindsight clean-up.

These zoning laws are based on weather and geographic considerations, as well as permissible density of population and industry. On the other hand, a city of 82,000 in Illinois lacks many basic measures that contribute to clean air. It fails to require use of even the inexpensive Ringelmann Chart—which indicates the shade of smoke. This device permits observation of smoke plumes from apartment house coal-fired heating or power plants. The chart enables the user to determine the efficiency of combustion by the cleanliness of smoke.

Incomplete Combustion
Black smoke represents incomplete combustion, inefficiency, wasted fuel dollars. A simple adjustment on the furnace to feed more air to the fire will minimize "fallout" from coal smoke. In Pittsburgh smoke clean-up is estimated to save each person \$41 a year—largely because of better combustion.

Air pollution is a peculiarly local problem, and no national panacea exists. Various industries—such as the electric power, chemical, iron and steel, oil and automobile manufacturing—have spent millions of dollars on highly specialized equipment needed to control their own particular pollutant emissions.

In many instances, heavy clouds of black smoke no longer belch from tall stacks. In these cases, this nuisance has been cleaned up. But another nuisance remains—the gaseous sulfur and nitrogen compounds, among others, that invisibly escape into the air and attack property and, it is believed, health.

Dealing With Menace
Finding economical ways of dealing with this menace is one of the top-drawer projects

for researchers. Many of the compounds are relatively inert, making it difficult to trap them easily. Perhaps a glimmer of hope is beginning to shine from the auto industry's research labs that even these invisible agents can be controlled.

The automobile is fingered by the U.S. Public Health Service as being our biggest, single source of future widespread pollution. From the automobile come hydrocarbons that under certain weather and geographic conditions make eye-smarting smog and chemicals corrosive to metals.

Up to 30 per cent of these hydrocarbons escape from the car's fuel system—it's carburetor float bowl, and fuel tank. Some escape from the crankcase, but most are spewed out the tailpipe.

Responding to growing pressure, automobile makers have stepped up research to produce three possible exhaust cleaners now in the prototype stage. One is a flame-type afterburner designed to kill "live" fuel leaving the engine. The second is a low-temperature catalytic converter designed to oxidize hydrocarbons. The third is a high-temperature catalytic converter.

Reductions in hydrocarbon and carbon monoxide emissions achieved experimentally with these exhaust cleaners ran from 60 per cent to 80 per cent.

Eventual Control
But eventual control even of all automobile exhaust gases does not mean the air pollution problem will be licked. Instead it will mean that one more source has been smacked hard by joint citizen and industry action. Attention then can be focused on new offenders growing out of further national progress.

It appears that we may be destined to live the rest of our lives in pollution. It is a costly problem and cannot be ignored.

Experts believe our chief challenge today is to go after all sources with the many devices and controls now commercially available. The challenge, they say, is to develop new and better ways of eliminating pollutants. The challenge is to improve the air we breathe—or at least "hold the line" so that it does not grow vastly worse.

This challenge rests with the people—who may have to give up leaf burning and backyard incineration.

It rests with local governments—who must be keenly appreciative of such anti-smog remedies as one-way streets to keep traffic moving.

It rests with state governments—who must assist local communities meet their problems, both technically and with laws.

And, finally, it rests with the Federal Government—which, because of its facilities and knowledge, can offer advice and help to the states, towns and citizens who request it.

Desert Toads Develop Faster Than Relatives

San Diego, Calif.—(Science Service)—Desert toads develop much faster than their relatives in wet, marshy areas, Dr. W. Frank Blair of the University of Texas told scientists here at the American Society of Ichthyologists and Herpetologists meeting.

Living in the desert means the toads must take advantage of infrequent rain falls for breeding, hatching and metamorphosis from tadpole to frog. Complete metamorphosis can take only nine days, compared with as much as two years in a bullfrog. Male desert toads have also developed a louder mating call for "getting all the toads together."

AMBUSH SUSPECTS HELD

Heirut—(UPI)—The government announced Tuesday night that it had arrested 49 persons suspected of complicity in the assassination of Lebanese Parliamentary Deputy Naim Mougabgab. Mougabgab, a strong supporter of former president Camille Chamoun, was fatally wounded in an ambush Monday night.

The tolls for the new St. Lawrence Seaway have been agreed upon and are sealed to pay for the cost of the project in 50 years.

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Bicycle Theft Ring Broken in Salem

Salem—(UPI)—Six Salem youths between 12 and 15 were arrested here Tuesday as city detectives broke up an alleged bicycle theft ring. Police said the boys had taken the bicycles apart and repainted them.

All six were cited to appear in Juvenile Court Aug. 3. Eight bicycles, stolen parts and paint were confiscated, police said.

Cotopaxi volcano in Ecuador is 19,344 feet high.

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Court Records

MUNICIPAL COURT
Jess D. Jansen, disobeyed stop sign, \$5.
John Jamison, expired license plates, \$2.50.
Cora E. Vinson, violation of basic rule, \$10.
Paul Sparling, improper left turn, \$5.
Dale L. Smith, violation of basic rule, \$10.
Bessie L. King, failed to yield right of way, \$22.
Travis E. Moore, no operator's license in possession, \$15.
Jay W. Taylor, expired license plates, \$2.50.
John P. Walsh, expired license plates, \$2.50.

DISTRICT COURT
Dave L. McAnally, no vehicle license, \$10.
John H. Flett, improper license, \$6.
Kenneth D. Robertson, inadequate brakes, \$10.
Raymond E. West, no PUC permit, \$15.
Theodore L. Anderson, racing on a public highway, \$55.
Glenn A. Backes, failure to stop, \$10.
Cecil L. Johnson, overweight, \$7.50.
Harold A. Gundlach, no operator's license, \$10.
Justin L. Wolfe, failure to stop, \$10.
Ralph S. Anderson, failure to stop, \$10.
Thelma M. Short, failure to stop, \$10.
Myrtle R. Davis, failure to stop, \$10.
Kenneth Dunlap, disorderly conduct, \$30.
George V. Wallace, no operator's license, \$10.

CIRCUIT COURT
Betty Ann Gregory vs. William Herbert Gregory, divorce decree.
Evelyn D. Phillips vs. Otis A. Phillips, divorce complaint.
Vicky Garboden vs. Dennis Garboden, divorce complaint.
Roy E. Herrick vs. Beryl M. Herrick, divorce complaint.

MARRIAGE LICENSE APPLICATIONS
Dunne Stuart Alvord, 748 West Fourth St., and Nancy Louise Newton, 916 Whitman Ave.

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