

Résumé of Work in Air Pollution Control

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A IR POLLUTION must be controlled by reducing or eliminating the pollutants being discharged into the atmosphere. This is usually accomplished by the enactment and enforcement of laws, rules, and regulations that limit the quantity of material released into the air. Laws and law enforcement, therefore, are an important part of air pollution control.

The legal aspects of air pollution control encompass much more than enforcement of laws. The failure to solve existing problems often has been due to such factors as lack of knowledge of the cause, lack of means to control some pollutants, or lack of strong community support for the control effort.

A successful control program is one based on facts and one that the community understands and accepts, not only as necessary but also as desirable. This implies that the cause of the pollution and its effects are known, that control methods are available, and that enforcement of the laws and regulations will solve the problem. These conditions are usually met when air pollution results from a single source, such as smoke from a burning dump or dust from a hotasphalt plant. Most of the present laws on emission of pollutants were developed to deal with a single source of pollution, and it is in these instances that air pollution control has been most successful.

Unfortunately, similar success stories are not common in large metropolitan areas. Here, many types of pollutants are emitted from millions of sources throughout the community. The contaminants are intermingled in an air

Mr. Maga is chief of the bureau of air sanitation, California State Department of Public Health, Berkeley. mass covering hundreds of square miles and are spread throughout the community, making it impossible to relate the effects experienced in one part of the city to the sources in another. It is also difficult to determine which pollutants should be controlled and the rules and regulations that should be adopted.

Communitywide air pollution is so intimately related to the many other activities in metropolitan regions that a solution to air pollution usually has a profound effect on these activities. London and Los Angeles are good examples. The burning of soft coal in households is the major source of smoke and sulfur dioxide in London. A successful attack on that city's air pollution, therefore, requires that something be done to prevent or reduce the smoke and sulfur dioxide from the individual households. This, however, involves millions of individuals and changing the manner in which Londoners are accustomed to heating their homes, which can only be done, of course, at considerable cost.

In Los Angeles, where motor vehicles are the major source of pollutants, correction depends on controlling emissions from more than 3 million automobiles. This requires installation of devices on these vehicles and establishment of inspection stations. It is difficult to find another source of air pollution where control will directly affect so many people.

The transportation pattern in the area influences the use of vehicles and quantity of pollutants emitted from this source. Yet, decisions on transportation involve many considerations other than air pollution, some of which may conflict with the goals of air pollution control. Banning backyard burning can only be done if a new trash collection system is provided and adequate disposal sites are available, all at an added cost to the homeowner. In all these instances the laws or regulations needed to bring about control are but a part of the overall solution.

These complex problems have grown with the concentration of people and related activities in metropolitan regions. It is clear that air pollution problems are not going to become easier to solve with continued growth and further concentration of people in urban areas. We can look forward to more control of all sources (industrial, commercial, municipal, and individual), to more laws and regulations, and to extending the enforcement of laws to the individual more directly than ever before.

For many years air pollution control programs were concerned mainly with the enforcement of regulations adopted against the discharge of smoke and dusts from industrial sources and coal-fired boilers. Not many control agencies had well-trained technical staff and monitoring programs. Little attention was directed at gaseous pollutants, except sulfur dioxide when it damaged vegetation. Most air pollution control agencies in the large communities now include broader technical services. This change developed with the recognition that smoke and dusts were not the only pollutants for concern. It was also influenced by the occurrence of photochemical smog in Los Angeles and the importance that area has placed on research, air measurement, and technical staff.

More and more emphasis is also being placed on the need to know what air pollution levels are throughout the community and on keeping an inventory of the quantity of contaminants discharged from the various sources. The larger the number of sources in a community, the more important it is to obtain this information.

Research efforts have increased together with greater emphasis on technical programs. Much research is directed at the effects of pollutants. It will take a long time to find many of the answers, but in time we will better understand the causes and effects of air pollution. These facts will in turn permit us to define the problem more accurately and to determine the rules and regulations that are needed to solve it. Information of this kind is urgently required for pollutants that may have toxic effects or enter into reactions in the atmosphere. Hydrocarbons, oxide of nitrogen, and carbon monoxide are examples of these compounds.

Within the past 4 or 5 years much interest has developed in air quality standards. In 1959 the California Legislature required the Department of Public Health to establish such standards. To date we have only made a start in this area, but the wide attention it is receiving is certain to lead to standards for more and more compounds. It is not yet clear how these standards will influence air pollution laws and regulations. In my opinion, they will have a far-reaching effect and will become the basis for many of the future regulations on emissions. In California the standards have already been used as a basis for the control of motor vehicle emissions.

Another recent development is the control of emissions from motor vehicles. As I have mentioned, this will apply air pollution control laws to almost everyone. Because of the large number of vehicles involved, the total cost of controls will be very high. New kinds of law and enforcement programs are necessary to deal with automobile emissions.

To date, the local community or a local air pollution control district has usually been responsible for the enforcement of regulations and rules. Because of the mobile nature of vehicles and because they are taxed and licensed by the State, it may not be feasible for local agencies to control this source. In California the State level of government is responsible for the control of automobile emissions. Local government retains the authority for the control of all other sources. Thus, two levels of government are responsible for air pollution control in California-the State and the county. Decisions of each will have an important bearing on the air quality of the community. Obviously, the relative importance of vehicular and nonvehicular sources, and the need for new regulations by one or the other agency can be determined only from data on the air pollution levels and the quantity of emissions from the many sources.

A final subject is the increasingly important role that the Federal Government will have. Air pollution control started strictly as a local effort. States and the Federal Government have now become involved. The Department of Health, Education, and Welfare at present supports much of the research that is being done. It also provides technical assistance and training. Legislation pending in Congress will increase the role of the Federal Government. While this legislation leaves the authority for control at the State and local levels, it provides for enforcement and assistance upon request. The legislation also provides grants to support the establishment and expansion of local control programs.

Case Note . . . Narcotics Addiction

Court upholds State authority to require supervision of narcotic addict to assure rehabilitation. In re Trummer, 36 Cal. 281, 388 P. 2d 177 (1964).

Petitioner Trummer had been civilly committed as a narcotics addict under section 6451, California Penal Code, after pleading guilty to the charge of forging a narcotics prescription. After 10 months of treatment at the California Rehabilitation Center, he was paroled and placed in an outpatient status for a minimum of 3 years. Trummer brought this petition for habeas corpus contending, among other things, that he should be released from parole since he was no longer addicted to narcotics and that the State may not detain a civilly committed addict after he has been "cured."

In denying the petition, the court rejected this argument, pointing out that the statute was directed not merely at relieving the addict's physical addiction, a temporary "cure" at best, but also at rehabilitating the addict.

The court observed that experience with past programs for the treatment of narcotic addiction had shown "that a lack of follow-up supervision results in a high rate of relapse." The challenged California "parole" (outpatient) system, the court said, was intended to overcome this defect by providing the necessary followup through counseling, testing for narcotic use, and immediate return for further treatment; procedures that were "designed to meet the particular needs of an addict in the later stages of the process of rehabilitation."

Viewing this process as an integral part of the treatment for narcotic addiction, the court upheld the right of the State to detain or place in outpatient status an addict who is no longer physically addicted to narcotics, declaring (p. 179):

"Thus, although petitioner currently may give every appearance of being 'cured' of his addiction, it is within the constitutional power of the Legislature to require that a person once committed as a narcotics addict remain under supervision for a period sufficient to give reasonable assurance against relapse. The time during which a relapse could occur cannot be determined precisely, and we cannot state that the three year minimum period of parole (in effect and now designated, outpatient status) here established by the Legislature is an unreasonable one."