

ENVIRONMENTALISTS, SANITARIANS (OR WHATEVER) AND THE ENVIRONMENT

BY: Larry J. Gordon, M.S., M.P.H., Director
New Mexico Scientific Laboratory System
2929 Monte Vista, N.E.
Albuquerque, New Mexico 87106

The lack of firm, explicit and practical management foundations for many of our nation's federal, state, and local environmental health programs has been all too obvious in recent years. This weakness has been pinpointed and noticeable during this "age of the environment" which began in the late 60's and will no doubt continue far into the future. There is no longer any doubt that the environment must be managed and will be managed. The only remaining questions relate to "how" and "by whom". Traditionally trained and experienced "environmental healthers" have frequently not exhibited the management knowledge and capability to cope with or show leadership regarding the new found public and political pressures, organizational trends, expanded program methodology, legislative demands and mandates, broadened program scope, and evolving program goals. All too frequently our environmental health leaders have been viewed as negative obstructionists rather than constructive leaders and have exhibited territorial defense mechanisms in lieu of creating, promoting, and justifying effective program and organizational concepts to meet the public clamor for a quality environment. "There go my people and I am their leader" has become a truism.

Basic to the problem of management inadequacies has been the lack of an understandable, stated goal for environmental health programs and agencies. A goal may be simply defined as an "ultimate desired condition". Even though a goal may be stated in somewhat nebulous terminology, such a statement is still necessary as a means of maintaining consistent program direction. A suggested goal of

Presented at Colorado State University, Fort Collins, on February 20, 1975; and at an environmental health training course sponsored by the Colorado Environmental Health Association at the University of Colorado, Boulder, on February 21, 1975.

environmental programs might be "insuring an environment that will confer optimal health, safety, comfort, and wellbeing on this and future generations".

Another important and basic factor in many environmental agencies and programs is the statement of a mission. Simply stated, a mission is a statement indicating an agency's constituency or clientele. For example, an environmental agency should have a mission of consumer protection and public service. A laboratory should have a mission of providing service to other agencies and departments. Certain types of agencies such as an agriculture department have a mission of promoting and protecting a given industry. Conflicts of interest occur when such missions are mixed with the resultant "fox in the henhouse" syndrome. It is patently impossible to have a mission of consumer protection coupled with a mission of protecting and promoting a given industry or other special interest group. These situations do exist and continuously result in the public being defrauded instead of being protected.

Inasmuch as many environmental agencies have not fully developed the concept of a mission, these agencies have been ready prey for those businesses and industries which they are empowered to regulate. This has frequently resulted in the regulating agencies actually protecting or even promoting the interests of those they are charged with regulating.

Equally as onerous is the situation wherein an agency having a clear legal mandate of public service and consumer protection is saddled with a board or commission loaded with special interest groups such as representatives of polluting industries. This poses another conflict of interest which defrauds and effectively disenfranchises the citizenry.

Even laws and regulations must be viewed with skepticism to determine if they are really designed to provide for rapid and equitable resolution of alleged violations or if they are so couched in hazy definitions and procedural delays as to serve the purpose of protecting the polluter.

Another management concept worth understanding is that of program scope and program-problem relationships. A "program" may be defined as a rational grouping of methods or activities designed to solve one or more problems. An environmental "problem" may be defined as "a reasonably discrete environmental factor having an impact on man's health, safety, comfort, or wellbeing."

Program scope is usually defined by a governmental body such as the Congress, a legislature, a board, council or commission. However, in order to understand the value of and need for having major environmental health and environmental protection regulatory programs managed within a single agency, it is imperative to understand program-problem definitions and interrelationships. Much of the recent environmental program fragmentation at federal, state and local levels might have been prevented if environmental program managers, citizens, and political leaders had a working concept of these relationships.

A few examples of environmental "problems" with a biased indication of their relative importance or level of priority might be in order, as follows:

- | | |
|-----------|---|
| Level I | population numbers and density |
| Level II | energy, transportation and land-use |
| Level III | air pollution, solid wastes, water pollution, food,
environmental injuries, environmental chemicals, noise
pollution, radiation, and water supply |

Society, through its legislative processes, has generally decreed a degree of curative environmental management through formal environmental programs for the type of problems listed in Priority Level III. However, formal programming to effectively address the more basic and preventive issues in Levels I and II has not been allowed or decreed. Those listed in Level II are now being widely discussed but thus far most efforts have been restrained to "skirting and flirting". It will undoubtedly be many decades before formal programming is seriously considered to deal with the most basic and highest priority issues - - - those of (a) population

numbers and density, and (b) population life styles and resource consumption of the human animal. Environmental health and environmental protection agencies, therefore, are usually only dealing with the by-products of the basic problems. Programs designed to solve the Level III problems are, therefore, actually curative rather than preventive. The basic issues are not yet subject to programming. However, such basic problems are still environmental and solutions must have input from environmental agencies and personnel.

The attached chart may be helpful to more fully understand program-problem solving, and the need to have major environmental regulatory efforts centralized rather than fragmented. (See attached chart).

When studying the attached chart of program-problem relationships, it can be seen that it is inefficient, uneconomical, and administratively inappropriate to separate certain environmental programs inasuch as a number of appropriately designed programs may aid in solving any given environmental problem. The chart also indicates the improper and inefficient design of many environmental programs, e.g., Food Quality. A properly designed food quality program, for example, should not be aimed at solving only the food problem but should have an impact on other problems as indicated.

The question of organizational or institutional settings for environmental health programs is another management concept that has completely dumbfounded many of the old-style "public healthers". Everyone manages the environment to some degree. Dozens of agencies at all levels of government have a share of the action in terms of regulation, education, research, demonstration, and consultation. For reasons of operational economy and program effectiveness, it is important and valid to recommend that major environmental regulatory functions at each level of government be managed within a single agency. I have previously indicated that this can be explained and supported in terms of environmental and administrative program-problem interdigitation.

The type and organizational location of this environmental agency is another matter. Historically, relatively narrow, single-purpose (i.e., health) environmental health programs were almost solely the province of health departments and the health profession at all levels of government. Public and political clamor and concern over the rapidly deteriorating environment in the late 1960's caused a widespread re-evaluation of environmental problems, program goals, program scope, program effectiveness, program support, environmental legislation, as well as program organization and institutional settings. Programs were shifted to new and/or different agencies for a variety of reasons - - - some valid and some questionable. Eager citizen environmentalists and citizen action groups sometimes confused change with progress. Public and environmental officials generally exhibited a high degree of territorial defense and a relatively low titer of organizational and program management knowledge. Powerful polluter lobbyists delighted in the opportunity to retard and confuse environmental management through repeated reorganizations and by placing environmental personnel and agencies in positions of greater "political responsiveness". The federal Environmental Protection Agency has been touted as a model for state environmental agencies and this, in turn, has led to further undesirable program fragmentation in many states imbued with the desire to follow the federal "model".

There is no standard "model" to be followed, but perhaps there are some basic organizational principles to be considered when organizing environmental agencies at the state or local level. These include (1) organizational visibility, (2) programming on a multiple goal basis, (3) freedom of inter-agency communication and coordination, (4) operating with a mission of public service and consumer protection, (5) responsiveness to public sentiment, (6) ease of regulatory actions, (7) comprehensive programming, (8) legislation designed for rapid, equitable results instead of procedural delays, (9) line item budgets for the environmental agency, (10) programmed for environmental protection rather than environmental utilization

and development, (11) regulations and standards promulgated by a board or commission representing balanced public interests.

The foregoing principles may be attained in a variety of organizational arrangements ranging from an appropriate environmental agency within a health department to a separate, free-standing environmental agency or department. In any case, however, adherence to the foregoing principles is necessary if there is to be an effective environmental protection effort.

Another management component which demands understanding is that of program methodology. Program methods constitute programs and are simply specific methods of solving or abating one or more environmental problems. Historically, such methods tended to be rather narrow and limited in scope and thereby in ineffectiveness. One method, namely that of "inspection" was so frequently utilized almost to the exclusion of other methods, that many early-day environmental personnel were known and/or classified as "inspectors". To date, a veritable arsenal of program methods are known, authorized, utilized, and demanded by the public and our political leaders. These include public information, research, demonstration, inspection, sampling, laboratory identification and analyses, surveillance, education of target groups, environmental impact statements, coalitions with other environmental groups, economic and social incentives, warnings, hearings, permits, grading, compliance schedules, variances, injunctions, penalties, and administrative fines. Other methodology will, no doubt, be developed in direct relationship to the public demand for environmental quality.

And since programs and organizations require manpower, a few words about manpower. When one grasps the magnitude and scope of environmental problems, understands their vital importance to this and future generations, scans the maze of organizational arrangements for delivering programs, and views the variety of useful program methods, it becomes obvious that the scope of environmental manpower required is as broad as the environment. Such manpower necessitates

educational achievements through a spectrum from the lowest assistant or inspector through the various types of doctoral level environmentalists. Truly, the environmental programs demand an alliance of physical scientists, life scientists, social scientists, engineers, planners, technicians, laboratory scientists, veterinarians, physicians - - - the list is endless and all types are necessary.

Traditionally, environmental programs were erroneously thought to be (and perhaps were) the province of engineers, with other professions such as "sanitarians" playing an ancillary and subordinate role. This manpower concept is now known to be inappropriate and archaic. The mantle of environmental program leadership now falls to those who earn it, be they the "doctors, lawyers; or Indian chiefs".

A final thought about the environment and the economy. It isn't a case of "versus" or "either/or". The environment and the economy are not contradictory expectations or values and, in fact, are mutually interdependent. We can't have an economy without an environment. And two basic ecological considerations should be kept foremost in mind when considering the environment and economy. (1) everything is connected to everything else, and (2) we should strive for the greatest good for the largest number over the longest period of time.

I am advised that "ecology" and "economy" are both derivatives of the Greek word "ecos" (oikos) which means house. An economist was a keeper of the house and an ecologist is a keeper of the big house we all live in - - - or our environment, the place in which we are all going to spend the rest of our lives.

