

# Organization of Environmental Programs at the State Level

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## ABSTRACT

There are no standard "models" to be followed, but there are some basic organizational principles to be considered when organizing environmental agencies at the state or local level. These include (a) organizational visibility, (b) programming on a multiple goal basis, (c) freedom of interagency communication and coordination, (d) operating with a mission of public service and consumer protection, (e) responsiveness to public sentiment, (f) ease of regulatory actions, (g) comprehensive programming, (h) legislation designed for rapid, equitable results instead of procedural delays, (i) line item budgets for the environmental agency, (j) programmed for environmental protection rather than environmental utilization and development, and k) regulations and standards promulgated by a board or commission representing balanced public interests. The foregoing principles maybe 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. However, adherence to the foregoing principles is necessary if there is to be an effective environmental protection effort.

It is understandable that everyone has a different opinion about organization of environmental programs in this decade of the environment. The issue of organization of environmental programs is viewed from significantly differing perspectives depending on whether one is an employee involved, one who is regulated by these programs, one who is a citizen activist, or whether one is a political leader attempting to balance the interests of the various parties involved. Because of these differing perceptions, a student of the organization of environmental programs quickly comes to the conclusion that there is definitely no standard model to be followed and it is indeed doubtful if any two state organizations resemble each other very closely. Many of us usually remember the "good old days" when this was not true and it was generally assumed that most environmental health programs were organized within the framework of the traditional state health departments. But with emphasis on consumer protection, Comprehensive environmental management, organizational visibility of environmental programs, importance of citizen input and participation and effective regulatory actions, the organizational picture has changed radically within the past 5 to 10 years.

Additionally, the organizational arrangements and interrelationships are further confused by the differing definitions and vocabulary used concerning environmental

programs. Some states have chosen to reorganize and place emphasis on something called "pollution control" which terminology can, by definition, be used to cover almost any environmental program desired. However, such states have usually confined such "pollution control" programs to those involved in the air-water-wastes syndrome. Others have retained the terminology "environmental sanitation" or "environmental health" and typically have consigned such programs to their state health departments. Still other states have used terminology such as "environmental protection," "environmental improvement," or even "environmental quality." The latter terminology generally being utilized in the most comprehensive sense to cover problems such as air, water, solid wastes, environmental chemicals, environmental injuries, noise, shelter, food, and radiation. And still other states have gone considerably further by combining not only environmental protection functions but also attempting to intertwine programs of environmental protection with programs of environmental utilization or development. The latter, while seeming to be the most comprehensive, are inherently dangerous in that the obvious mixture of goals poses one of the most dangerous conflict-of-interest situations to be found in government today.

My background has primarily been in management of environmental health and environmental protection programs. For this reason, it may be desirable to briefly set the stage by describing the nature of three different types of organizations with which I have been privileged to be associated.

#### FIRST EXAMPLE

The City of Albuquerque, New Mexico had a reasonably traditional approach to "public health" until the mid 50's. Locally, all environmental and personal health activities were under the jurisdiction of a medical health officer to the end that there was a fairly traditional textbook approach. Some of us began questioning this concept and organization and over a period of time prevailed upon the various local governing bodies and the state legislature to form a city Department of Environmental Health (it later became a city-county Department of Environmental Health) completely separate from the local public health functions that were assigned to a Department of Preventive Medicine and Personal Health. In 1975, this concept is reasonably commonplace and certainly well accepted. However, in the mid 50's, implementation of this type of

organization literally took place over the prostrate bodies of several medical health officers, the State Health director, and some other leaders in the medical community. At the time of this separation and the creation of the two distinct departments, the environmental health activities were constrained to rather perfunctory activities in the field of milk and food sanitation and meat inspection and involved a total of about 17 personnel. The environmental health programs had been stuck with the then time-honored formula of being allowed something like  $\frac{1}{a}$  the number of "sanitarians" as there were public health nurses.

Following a complete organization and budgetary separation with enhanced visibility, public information, planning, and programming, the Department of Environmental Health took on added functions involving water supply, water pollution control, air pollution, radiation protection, occupational safety and health, insect and rodent control, pure food control, and housing conservation and rehabilitation. Later, the Department spawned the city programs of Model Cities, low-rent public housing, and Urban Renewal, and was also given the quite questionable "privilege" of administering the Refuse Division and Animal Control Division. Within a few years, the Department had grown from 17 to something like 460 personnel and a multi-million dollar budget.

## SECOND EXAMPLE

In 1967, the Governor of New Mexico, by Executive Order, merged the New Mexico Department of Public Health and the New Mexico Department of Welfare into an umbrella Department termed the Health and Social Services Department. While this merger seemingly focused increased emphasis on problems of personal health and welfare, it also provided the opportunity to gain increased visibility, scope, and effectiveness for environmental health activities. I was privileged to be appointed director of the newly formed Environmental Services Division of the Health and Social Services Department. Top management of the Department was so engrossed in the overwhelming problems of welfare and Medicaid that the relatively small Environmental Services Division was somewhat left to do its own thing and given the opportunity to accomplish basic planning, organizing, and programming. Thankfully, it was about this same time that the public in New Mexico, the nation, and, indeed, the world finally became concerned about the status of the rapidly deteriorating environment and the inability of

existing programs, organizations, and approaches to satisfactorily cope with these problems.

During the 1970 gubernatorial campaign, promises were made to create an environmental protection agency within state government to better manage the environment. Following the election, we proposed that the environmental protection agency include all programs previously assigned to the Environmental Services Division, that there be a budget sufficient to include all personnel in the Environmental Services Division plus all environmental health personnel previously known as county or district sanitarians, that it be based on the pursuit of goals including but much broader than mere "health," and that new and necessary programs be authorized. During the legislative process, the terminology for the proposed agency was changed from Environmental Protection Agency to the New Mexico Environmental Improvement Agency and it was organized within and as an integral component of the New Mexico Health and Social Services Department. From an authorized strength of something like 37 personnel assigned to the Environmental Services Division in 1967, the agency expanded and prospered to a strength of 260 in 1973 and included such programs as food protection, air quality, water quality, water supply, radiation protection, occupational safety and health, noise control, solid wastes management, environmental chemicals, insect and rodent control, swimming pool safety and sanitation, subdivision control, etc.

### THIRD EXAMPLE

In 1973, we requested legislative authorization and funding to organize a comprehensive consolidated state laboratory system to serve all state and many federal agencies desiring laboratory support services. This was the first step in organizing the Scientific Laboratory System to which I was appointed as director in August 1973. I had long been concerned about fragmentation and duplication of laboratory services, the lack of a clear and explicit service-oriented mission for the laboratory, and the need for a modern laboratory facility. The Scientific Laboratory System is now well-established and is routinely serving such agencies as the Environmental Improvement Agency, the State Health Agency, the State Welfare Agency, the New Mexico Traffic Safety Commission, the Game and Fish Department, Department of Corrections, Department of Hospitals and Institutions, New Mexico Racing Commission, Indian Health Service, Forest Service,

Veterans Administration, local law enforcement agencies, and others on a fee-for-service basis.

I have taken the time to describe three different types of organizations not so much to tout them as "models" but rather to indicate different types of approaches that may be considered. But I also wish the foregoing to serve as examples that institutions can be changed or created for good cause with enough perseverance.

### MANAGEMENT OF PROGRAMS

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.

#### *Environmental and personal health*

First of all, and particularly for persons usually interested in environmental health programs, it may be necessary to indicate the difference between environmental health programs and personal health programs. Environmental health programs are simply organized methods of solving environmental problems which have a significant health component through means of manipulating or managing the environment. Contrary wise, personal health programs should be addressing those health issues which can best be handled by manipulating the individual.

## *Goals*

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 environmental programs might be "insuring an environment that will confer optimal health, safety, comfort, and well-being on this and future generations." You will notice that I use the terminology "health, safety, comfort and well-being" which signifies my belief that few, if any, environmental problems can be successfully solved on a "health" basis only.

## *Mission*

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.

Since 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.

### *Program scope*

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 well-being".

Program scope is usually defined by a governmental body such as the Congress, a legislature, a board, council, or commission. However, 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: (a) Level I: population numbers and density; (b) Level II: energy, transportation, and land-use; and (c) 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

When studying program-problem relationships it is inefficient, uneconomical, and administratively inappropriate to separate certain environmental programs since several appropriately designed programs may aid in solving any given environmental problems. 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.

### *Institutional setting*

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."

The federal government must also share or accept responsibility for imposition on states of narrowly oriented, single-purpose codes conceived through tunnel vision. The federal codes and regulations relating to such problems as food, milk, occupational health, air pollution, water pollution, etc. are all beautiful examples of the administrative problem of single-problem-oriented codes which truly result in a disservice and extra expense to our taxpayers.

Another issue basic to an environmental organization is the determination of the complete spectrum of problem-solving methods which can or should be utilized to solve the previously listed scope of environmental problems. And next comes the highly important process of developing "programs" which, as previously defined, are "rational groupings of activities designed to solve one or more environmental problems."

It is in this process that we truly need some organizational and management creativeness and innovation if we are to deliver environmental service efficiently and effectively. Again, this relates to the previously mentioned issue of single problem codes. Table 1 indicated the basic interrelationship between a number of environmental problems which should best be handled within one organizational framework. No doubt, many of our programs should properly be repackaged and renamed. Even industry has learned that products must be repackaged, re-titled, and re-promoted occasionally to

provide the best sales possible. Having properly designed programs which address various important environmental problems might also be a step toward discouraging the practice of continuing to apply undue effort toward a problem which has been basically solved. Program personnel may not desire to completely solve the problem if it means that they would have to go out of business. Therefore, they frequently invent new aspects of the problem or, still worse, apply new and unnecessary requirements to the solution of the problem. For example, if 10 ft' of floor area is good, 20 is better; if one wash vat is good, two are better; if 100 ppm, 200 is better; or if a count of 30,000 is good, 15,000 is better. I am sure we must all admit to having seen examples of this type of program nonsense.

### CONCLUSIONS

Very simply, the environment can be defined as "that which surrounds." We should all understand the value of approaching the environment on a comprehensive basis with comprehensive programming and we should also understand the ecological and administrative interrelationships of programs. Environmental health programs are essential set-vices of state government, an unquestionably good investment, and they are ususally expected and demanded by our taxpayers.

Other items in common for most environmental health programs are those necessary program resources. Many of the basic environmental programs require a common type of manpower, equipment, facilities, legislation, and laboratory support services.

There are no standard "models" 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 (a) organizational visibility, (b) programming on a multiple goal basis, (c) freedom of interagency communication and coordination, (d) operating with a mission of public service arid consumer protection, (e) responsiveness to public sentiment, (f) ease of regulatory actions, (g) comprehensive programming, (h) legislation designed for rapid, equitable results instead of procedural delays, (i) line item budgets for the environmental agency, programmed for environmental protection rather than environmental utilization and development, and (k) 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 event, however, adherence to the foregoing principles is necessary if there is to be an effective environmental protection effort.

I recall reading a provocative *Journal of Milk and Food Technology* editorial written by one of our esteemed leaders some 20 years ago. It was entitled "*The Changes Have Already Taken Place*" and was written by our friend and former president of IAMFES, Dick Adams. Truly, many of the organizational changes have already taken place while many of us have had our heads buried in the sand bemoaning the changes but failing to provide organizational and program leadership. Obviously, the environment will be managed and the only questions really involve how and whom.

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, lawyers, 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. That 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 "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: (a) everything is connected to everything else, and (b) we should strive for the greatest good for the largest number over the longest period.**

**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 --- our environment, the place where we are all going to spend the rest of our lives.**

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