

ENVIRONMENTAL HEALTH ORGANIZATION AND MANAGEMENT: SOME DIFFERENT EXPERIENCES

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It is understandable that everyone has a different opinion about the organization of environmental health programs in this era of environmental protection and environmental controversy. The issue of organization of environmental health programs is viewed from significantly differing perspectives depending on whether one is an employee involved, one who is regulated by such programs, one who is a citizen activist, or whether one is a political leader attempting to balance the various interests involved. Because of these differing perspectives, a student of the organization of environmental health 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 the case 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 health programs, importance of citizen input and participation, and effective regulatory actions, the organizational picture has changed radically within the past ten years.

The organizational relationships and interrelationships are further confused by the differing definitions and vocabulary used concerning environmental health programs. Some states have chosen to re-organize and place emphasis on something called "pollution control" which terminology may, by definition, be used to cover almost any environmental program desired. However, such states have usually confined such "pollution control" programs to 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 include problems such as air, water, solid wastes, land-use, 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 and missions poses one of the most dangerous conflict-of-interest situations to be found in government today.

It is desirable to briefly set the stage by describing the nature of several 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 50s. Locally, all environmental health and personal health activities were under the jurisdiction of a traditional health department to the end that there was a fairly typical 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 other local public or personal health functions that are assigned to a Department of Preventive Medicine and Personal Health. In the year 1980, this concept is reasonably commonplace and certainly well accepted. However, in the mid-50s, implementation of this type of organization was new, untried, and unproven. 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 1/3 the number of environmental health personnel as there were public health nurses.

Following a complete reorganization 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, solid waste management, insect and rodent control, pure food control, and housing conservation and rehabilitation. Later, the Department spawned the city programs of Model Cities, low-rent leased public housing, and Urban Renewal and was also given the quite questionable "privilege" of administering the City Refuse and Animal Control Divisions. Within a period of a few years, the Department grew from 17 to 460 personnel and a multi-million dollar budget, and garnered widespread citizen and political support.

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 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, I contacted the Governor-Elect and 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 county and district environmental health personnel, that it be based on the pursuit of goals including but much broader than "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 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. With the creation of the New Mexico Health and Environment Department in 1978, the Environmental Improvement Agency became the Environmental Improvement Division of the new Department.

Third Example

In 1973, I requested legislative authorization and capital funding to organize and construct a comprehensive consolidated state laboratory system to serve all state, federal and local, and many other tax-supported 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 the 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 Division, the Health Services Division, the New Mexico Traffic Safety Commission, the Game and Fish Department, Department of Corrections, State Hospitals, New Mexico Racing Commission, Indian Health Service, Forest Service, Veterans Administration, Department of Agriculture, State Medical Examiner, local law enforcement agencies, and others on a fee-for-service basis. With the creation of the New Mexico Health and Environment Department in 1978, the Scientific Laboratory System became the Scientific Laboratory Division of the new Department.

Fourth Example

With the merger of the State Health and Welfare Departments in 1967, the personal health programs of the Department had been seriously fragmented into a number of separate organizational units; had lost necessary visibility, coordination, and effectiveness; and had suffered from a lack of high-level professional, coordinated leadership. In 1973, I recommended that the scattered personal health functions in the Health and Social Services Department be brought together organizationally and that professional personal health leadership and authority be established. As a result, the State Health Agency was created in 1973, becoming the Health Services Division of the New Mexico Health and Environment Department in 1975.

I have taken the time to describe four different types of organizations, not 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 planning and perseverance.

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 to obvious in recent years. This weakness has been pinpointed and noticeable during the "decade of the environment" that began in the late 60's. There is no longer any doubt that the environment must 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 scope, and evolving program goals. 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.

1) Let's bury the notion that managers in the public sector are inferior to those in the private sector, although there are many who subscribe to that point of view. The management inadequacies and bureaucratic bungling are as great in private industry, business, professional associations, and voluntary groups as in government -- they are more visible in government because of the necessity of public accountability.

2) Government will respond to modern management techniques as well, but perhaps not as rapidly, as private enterprise. Governmental managers have additional hurdles and points of endorsement or approval in order to change within the democratic process.

3) Being a competent professional manager does not depend on mastering a particular technical system, but is based on understanding and systematically applying the work of management in the areas of planning organizing, leading and controlling. This is perhaps one of the most important and critical concepts to master. Most "managers" have become managers after being successful technicians, and have frequently been "selected out" because of their proficiency as technicians. This system of promotion to management ranks may not be the best, but is quite common. Those managers who continue to ply their technical skills and continue to act as specialists instead of developing skills in terms of planning, organizing, leading, and controlling may never master the management arts. However, they may continue to be managers to the detriment of their agencies, programs, objectives, personnel, and the public.

4) A simple definition of management is "getting things done through other people." The manager who attempts to carry out every function or review every detail of his organization's function may find that he cannot see the forest for the trees, and, in fact, does not have time to be a manager.

5) Managers should be willing to create, innovate, and propose new organizations or program methods where needed instead of being slaves to tradition and routine. Many managers become so intent on defending tradition and their own territory that they do not have time or talents to plan and promote necessary changes.

6) Managers must make every effort to recruit and retain the best talent available even if this means recruiting personnel better qualified than the top manager. I have frequently observed management fear of such well-qualified personnel.

7) Managers must delegate freely and effectively in order to have time to carry out the most important management functions. This also prevents the manager from becoming a bottle-neck and improves the functions, value, and morale of subordinates.

8) Decision-making may well be the most important management function. But decisions must be made on the basis of the best facts available at the time. Some managers are so concerned about doing the right things that they do nothing - they simply study the problem to death. Frequently, there is more than one good answer to the problem -- and the manager must make the decision in order for his organization to get on with the job.

9) Considering all reasonable alternatives leading to resolving perceived problems sometimes seems to be a lost art. Alternatives to problem-solving may vary from consciously choosing an alternative to doing nothing, through studying fresh and unusual approaches, to immediately getting locked into single solution alternatives that lead to a pre-selected method of attempting to solve problems: The public, legislators, and governmental managers are constantly faced with the question of identifying and choosing alternative solutions to problems. Frequently, we find that all reasonable alternatives have not been considered, and that, in fact, we have by-passed the opportunity to consider all viable alternatives due to single solution decisions having already been made by those interests which stand to profit the most from the action, rather than the decision having been made on the basis of providing the greatest good for the largest number over the longest period of time.

10) Developing mature, productive, effective, knowledgeable employees and associates makes the manager look good. Give credit where credit is due. Utilize the principal that each of your employees should know more about his specific responsibilities than you do, or the organization is a failure.

11) The duties of every level of management and each employee should be specific and reasonably discrete. A manager's duties and responsibilities are not the sum total of that of his staff. A serious managerial and organizational problem exists when more than one person in an organization is perceived to have the same responsibilities in whole or in part.

Governmental agencies, programs, and efforts have literally mushroomed at all levels of government in the last ten to fifteen years. This has, resulted in a multiplicity of

new organizations and governmental activities being created without sufficient planning in many cases. Citizens and Legislators have sometimes been perplexed by the monsters that have been created. Agency personnel find themselves administering programs and attempting to solve problems in the absence of proper legislative guidance or policies. Managers are frequently in a quandary as to whether they should be advocating the perceived needs of their constituents, or simply reacting to available legislative direction.

Lawmakers have created agencies which are visualized as institutions to protect consumer interests, but many of these same agencies have evolved into institutions which seem to protect the interests of those whom they are designed to regulate. Other agencies have presumably had legislative mandate to protect and promote the interests of a given industry or constituency, and some of these agencies have been saddled with a conflict of interest by being charged with efforts to protect the consumer. Then still other governmental organizations have seemingly lost sight of the over-riding necessity for public accountability and openness. Important decisions continue to be made in back rooms and behind closed doors in the absence of the lights of public opinion.

The terms "goals, missions, and objectives" are frequently used somewhat interchangeably, without recourse to reasonably clear definitions.

A goal simply indicates the "ultimate desired condition." Objectives are specific landmarks to be achieved in attaining the goal. Therefore, a statement of a "goal" may be somewhat ethereal, nebulous, and even unattainable, but it does provide an indication of general direction to which all program objectives should be aimed.

A suggested goal tied to environmental health programs might be "ensuring an environment that will confer optimal health, safety, comfort, and well-being on this and future generations".

Another important and basic factor in many environmental health agencies and programs is the statement of a mission. Simply stated, a mission is a statement indicating an agency's service clientele. For example, an environmental health agency should have a mission of consumer protection and public service. Certain types of agencies such as an agriculture department have a mission of promotion 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 health agencies have not fully developed the concept of a mission, these agencies have been ready prey for those businesses and industries that 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.

The lack of clearly enunciated goals and missions has frequently led lawmakers to attempt to solve the problem by creating still another agency -again, possibly without articulating the necessary goals and missions. The lack of such agency goals and missions has also been partially responsible for undesirable program fragmentation resulting in unnecessary confusion, controversy, ineffectiveness, duplication, and expenditure. Even policy setting boards and commissions cannot properly function without the assignment of an overriding statement of direction and advocacy in terms of goals and missions. At still another level, program managers have every right to be confused and cannot do proper planning of objectives or management by objectives in the absence of assigned goals and missions.

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 disproportionately 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 well-being."

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 inter-relationships. 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.

Another management component that 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. Following the identification and development of program methods, it becomes logical to attempt to group these methods or activities into rational, effective programs. Perhaps innovative ideas in terms of program development are not always best accomplished by program personnel, inasmuch as such

personnel tend to defend current efforts and patterns. In theory, planning groups external to the program process provide the best hope for improving program methodology. In practice, such groups as HSAs, SHPDAs, SHCCs and Councils on Environmental Quality, and other such specially anointed groups have really not faced up to the need. In practice and in the real world as it continues to exist, programs are typically developed in a rather intuitive, irrational, short-sighted basis by a group of "experts" who usually have a case of "tunnelitis visionosis" at various levels of government. For example, let us consider a facility in which it was determined that problems of air pollution, water pollution, solid wastes, environmental injuries, biological insults, environmental chemicals, food protection, radiation, and noise pollution exist or may exist. It was further determined that program methods such as inspection, sampling, surveillance, analyses, regulation, consultation, training, and design would be useful in attempting to solve the environmental problems in this facility. This grouping of program methods designed to solve the previously listed environmental problems became known as the Food Quality Program. But later, another group of "experts" determined that another type of facility had problems of air pollution, water pollution, solid wastes, environmental injuries, biological insults, environmental chemicals, food protection, radiation, and noise pollution. It was further determined that program methods such as inspection, sampling, surveillance, analyses, regulation, consultation, training and design would be useful in attempting to solve the environmental problems in this facility. This group of program methods designed to solve the previously listed environmental problems became known as the "Occupational Safety and Health Program."

At some other time and place, another group of experts determined that another type of facility again included exactly the same type of problems as previously listed, and suggested that these problems could be solved by the same type of program methods as previously listed; but this time the program was labeled "Institutional Environmental Control."

The differences between the previously-listed program examples are not primarily those of problems or program methods, but rather those of priority or emphasis given the various problems within each facility. Therefore, it might be better if the labels were removed from all these programs, the programs combined into one, and the program simply be labeled something like "Program A." Subsequently, the program manager would be in the position of adjusting the emphasis given to the solution of the various problems in accordance with a method of determining priorities.

The type of organizational location of this another matter. Historically, relatively narrow environmental health programs were almost solely the province of health departments at all levels of government. Public and political clamor and concern in the late 1960s over the rapidly deteriorating environment caused a widespread re-evaluation of environmental health problems, program goals, program scope, program effectiveness, program support, 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 groups sometimes confused change with progress. Public and environmental health 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 health management through repeated reorganizations and by placing environmental health 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 health 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 health agency within a health department, to a separate, free-standing environmental health agency or department. In any case, adherence to the foregoing principles is necessary if there is to be an effective environmental health effort.

And finally, a few notes about the problem of "manpower." Totemism in the utilization and assignment of manpower has been particularly well-developed in the personal health and environmental health program areas. In the absence of such studies, we have continued to utilize totemism by assuming that a physician, an engineer, a sanitarian, an environmentalist, or a scientist automatically has the talents necessary to effectively engage in a specified program activity. In many cases, professionals are not being utilized effectively or in consonance with their talents and professional levels. We are frequently specifying a given type of professional based on one to five percent of the program requirements, rather than on 95 to 99 percent of the program requirements that might indicate a different type of employee. This problem of effectively utilizing and addressing manpower to program needs deserves all of our continuing attention in an effort to solve problems most effectively and get the most out of our limited budgets.

When one grasps the magnitude and scope of environmental health 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 health 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 environmental scientists. Truly, the environmental health programs demand an alliance of physical scientists, life scientists, social scientists, engineers, planners, technicians, laboratory scientists, veterinarians, physicians, attorneys - - the list is endless, and all types are necessary.

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