

A VISIT WITH A SANITARIAN
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Sanitarian

EARLY YEARS: WATER, WASTES, AND ENERGY EXPERIENCES

http://www.sanitarrians.org/Gordon/Mounds_and_Memories.pdf

CAREER YEARS: A DIFFERENT DRUMMER

Starting at \$225.00 per month with a title County “Sanitarian,” my experiences have been unusual, have led to marching to a different drummer and having developed different concepts regarding environmental health and protection. My career has included promotion or appointment to some 16 different positions in public health and environmental health and protection, and election to President of the American Public Health Association --- an office seldom held by a “Sanitarian.”

Like most practitioners, the positions titled “Sanitarian” were just that --- jobs having the title “Sanitarian.” As I moved into positions having different job titles, I am not sure when I evolved from a practitioner having the title “Sanitarian” to considering myself a professional “Sanitarian.” Some time ago, I began to use “Sanitarian” as my profession, rather than “Professor” as I had been doing for the past 20 years following retirement as “Secretary.”

Except for my duties as a PHS Officer during numerous nuclear tests, testifying before Congressional Committees and other official groups in Washington, activities as President of the American Public Health Association, consultant to NSF and UL, and dozens of consulting relationships with various components of the PHS, most of my experiences have been at the state and local levels. I recognize that leadership constraints are different at the federal level. State and local practitioners have much greater flexibility in their actions. But, hopefully, ideas from this seminar will be useful in your capacity building activities for state and local practitioners.

THE ART OF ENVIRONMENTAL HEALTH

Environmental health is an art as well as a science. Schools of public health, accredited environmental health programs and professional journals

tend to give short shrift to environmental health as an art. However, application of the science of environmental health depends on the art of environmental health.

The commonly accepted definition of environmental health and protection was developed by the Committee on the Future of Environmental Health as a result of peer review comments by some 75 representatives of such agencies and groups as NCEH, NACCHO, NCLEHA, APHA, NEHA, ASTHO, HRSA, CDC, ATSDR, EPA, various state and local health agencies, as well as several accredited environmental health and protection academic programs and schools of public health.

“Environmental health and protection is the art and science of protecting against environmental factors that may adversely impact human health or the ecological balances essential to long-term human health and environmental quality. Such factors include, but are not limited to: air, food and water contaminants; radiation; toxic chemicals; disease vectors; safety hazards; and habitat alterations.” Report of the Committee on the Future of Environmental Health”

The art of environmental health and protection includes those measures necessary to apply the science of environmental health, such as, but not limited to: developing policy, planning, regulating, organizing, leading, prioritizing, marketing, mentoring, managing, designing and implementing programs, evaluating programs, and ensuring consistent and continuing public information.

RELATIONSHIPS

Relationships with numerous mentors, associates, political leaders, media representatives and protégés is essential. Ability to cause change is based on such relationships.

My first boss in public health enjoyed holding forth at length about the history of public health as well as public health concepts and practice. I did not fully appreciate his ramblings until I increasingly understood that he was an invaluable mentor. At that time, I had not enjoyed the rarified atmosphere of a school of public health and in depth exposure to the art and science of public health. I should note that, in that era, schools of public health considered educating practitioners as their prime mission.

As I was promoted or appointed to other positions, I was mentored by a number of my Sanitary Engineer supervisors and associates who were only too willing to impart some of their wisdom to a lowly Sanitarian. At that time, sanitary engineers reigned supreme, the term “sanitary engineering” was largely used rather than “environmental health,” and sanitarians were only considered useful when under the supervision of an engineer.

Later, I had memorable discussions with such leaders as National Sanitation Foundation Executive Director Walter Snyder and Philadelphia Environmental Health Engineer Walt Purdom who further provoked many of my emerging concepts. Public Health Service Sanitarian Director Dick Clapp imparted memorable wit and wisdom as I participated with him in teaching CDC environmental health courses in considerably more a dozen states over the course of several years. University of North Carolina School of Public Health Sanitary Engineer Professor Emil Chanlett impressed me with observations such as *“environmental health being left half way between leprosy and the quarantine station.”* I profited immensely from discussions with Sanitarian icons Walter Mangold and University of California Professor Harry Bliss who designated me to succeed him as Editor of the Journal of Environmental Health. I was privileged to communicate frequently with Los Angeles Sanitary Engineer Director (subsequently UCLA Professor) Charlie Senn.

The foregoing leaders were of varying disciplines and professions, but they had one essential characteristic in common: **VISION**. Walter Snyder, Walt Purdom, Emil Chanlett, Dick Clapp, Harry Bliss, Walter Mangold, and Charlie Senn were visionaries and mentors for countless practitioners throughout our Nation.

Over several decades, I enjoyed inculcating associates with such concepts by precept and example. They learned on the job, and I successfully encouraged/supported many of them to earn masters or doctorates to further their star potentials. A number of them succeeded me in various positions (institutional DNA) as I was reported to new positions to avoid becoming root bound.

Last summer, my wife and I were guests of honor at a gathering organized by two long-ago associates and attended by several dozen stars with whom I had been associated in earlier years. Most are now retired. All

had achieved, been widely recognized, and made outstanding contributions to improving environmental health and protection in a wide variety of roles, agencies and locations. The roles of these and those of a few others who had already crossed the Great Divide included: City Environmental Health Director, County Environmental Health Director, State Environmental Improvement Director, State Public Health Director, State Scientific Laboratory Director, State Cabinet Secretary for Health, Regional EPA Environmental Services Director, Lovelace Research Foundation Director of Environmental Health, Model Cities Director, Deputy Director of a Public Health Institute, State Environmental Quality Department Director, State Health Planning Director, Coordinator Washington Congressional Delegation, Environmental Health Director for Los Alamos National Laboratories, Urban Renewal Director, top level position in a national environmental health consulting firm, City Housing Department Director, owner of an industrial hygiene consulting firm, Indian Health Service Epidemiologist, Chief of Staff for U.S. Congresswoman, State Air Quality Control Director, State Water Quality Control Director, State OSHA Director, Professor of Public Health, NCEH Consultant, Scientific Laboratory Quality Control Director, owner of a large public relations firm, City Manager, University Vice President, and Deputy Secretary of DOD for Environment. And we joked about our agency being the training academy for environmental health leadership positions at Los Alamos and Sandia National Laboratories.

An instructive note about these outstanding practitioners: all had commenced their careers in entrance grade roles, mostly as Sanitarians. Experience as a Sanitarian is an excellent route to pursue a variety of other managerial and leadership roles in the broad and complex field of environmental health and protection, public health, government and the private sector. Environmental health and protection practitioners not only manage a wide variety of environmental health and protection programs, but should also be involved in epidemiology, risk assessment, risk communication, risk management, public relations, community planning, regulation, inter-personal relations, policy development, technical reports, sampling and surveillance, analyses and interpretation of analyses, developing priorities, program design and evaluation, and administration.

Many of these protégés provided essential support and guidance for me as they spread their own wings and achieved professional recognition in their own right.

PAST, PRESENT AND FUTURE LEADERSHIP

During the last few decades, leadership has evolved from sanitary engineers through public health engineers, environmental health engineers, environmental health professionals such as sanitarians, to the current situation in which the preponderance of environmental health and protection practitioners are increasingly practitioners other than environmental health and protection professionals.

Most current practitioners have little knowledge that well qualified public health engineers reigned supreme prior to the era of environmental health professionals. In 1946, the ten members of the Executive Board of the Conference of Municipal Public Health Engineers found the evolving roles of Sanitarians a matter of concern. They discussed “--- *means of developing some basis for common action among personnel in the field of sanitation and for overcoming some of the divisive attitudes and influences which have developed in recent years. --- it is necessary to keep in mind that engineers, if they are to assume and maintain their proper position of administrative and technical leadership, must be able to manifest that leadership, directly or indirectly, in the organizations which have thus far been established by sanitation personnel. --- local, state and regional groups of sanitation personnel, particularly sanitarians, should continue to function as such and that they should be encouraged to function as such and that they should be encouraged to attend local meetings and programs for their principal contacts and exchange of ideas. --- such a council might eventually obtain some financial backing and eventually, though not immediately, undertake the publication of a Journal of Sanitation.*” (Entire document available if requested)

The incubators of environmental health and protection practitioners have also changed dramatically. Most schools of public health, once the prime incubators of environmental health and protection professionals, have opted to follow the money trail leading to health care and basic science research. Educating environmental health and protection professionals, an early mainstay in schools of public health, is now almost forgotten by the majority of schools of public health. A small percentage of today's environmental health and practitioners are being trained in accredited environmental health science and protection programs, but the vast majority are, and will continue to be, products of other essential disciplines and professions such as geology, chemistry, biology, law,

public administration, political science, engineering, social science, and economics.

It is estimated that no more than five percent of the current workforce is composed of environmental health and protection professionals, and this percentage is decreasing. Efforts by environmental health and protection leaders to impact this workforce development condition have been almost non-existent.

In the sanitation era, disease prevention was considered the primary benefit. Now, the benefits of environmental health and protection not only include reduced disease and disability, but also

- enhanced economic status,
- enhanced productivity,
- enhanced educational achievement,
- social problems,
- a more livable environment,
- a better quality of life, and
- reduced health care costs.

The scope of environmental health and protection problems represents the most dramatic changes. From a concern primarily with water supply, sewage disposal, waste disposal, swimming pools, food and milk, and vector control, the scope of environmental health and protection now includes (but is not limited to) such issues as air quality, radon, asbestos, noise, radiation, water pollution, drinking water, liquid wastes, food, fish and shellfish sanitation, poultry processing, milk sanitation, industrial hygiene and safety, disasters, housing, institutional facilities, unintentional injuries, land use, irradiation of food, swimming areas, solid wastes, hazardous materials, insects and rodents, bioterrorism, global climactic disruption, stratospheric ozone depletion, and global toxification.

Responsibilities for environmental health and protection have changed significantly from the era of sanitation and health department responsibility to the current pattern in which, at the state level, 90 to 95% of environmental health and protection activities are assigned to agencies other than health departments, and there is a similar trend at the local level.

Few environmental health and protection professionals have led in

supporting or opposing the foregoing policy changes. Many practitioners remain confined to the sanitation era, while others have evolved to embrace the current scope of environmental health and protection. Many remain adherents to the “inspect and react” mode, while others have evolved to utilize multiple program methods such as consultation, education, planning, community involvement, prevention, research, epidemiology, surveillance, incentives, public information, public policy development, and marketing.

Career-long learning must be available and promoted for the environmental health and protection workforce, no matter the agencies involved. This is particularly important due to the ever changing composition of the workforce. Such learning should take many forms, and the continuing education content should vary depending on the audience. Some practitioners need training in epidemiology and risk assessment; others in leadership, management, planning, marketing, policy and politics, and finance. Such training should be a cooperative venture between the several major federal agencies having environmental health and protection responsibilities.

Developing and pursuing a meaningful vision that is more than blurred imagination would help to invoke support of those charged with financing programs and educating the workforce. Vision is essential to leadership. <http://www.sanitarians.org/Gordon/EHvision.pdf>

Environmental health and protection practitioners should be trained to become involved in prevention when initial decisions are made regarding land use, resource utilization, energy alternatives, global environmental health and protection problems, transportation methodologies, economic development and public education. To do this, requires that environmental health and protection professionals seek leadership and policy roles in a wide variety of environmental health and protection agencies, as well as in the private sector.

THE WORKFORCE: WE HAVE MET THE ENEMY AND HE IS US

In 1990, I wrote an editorial for the American Journal of Public Health titled “Who Will Manage the Environment.” The editorial stated, in part:

“It is no longer a question of whether our environment will be managed, but rather how and by whom. The by whom is at least as

important as the how, since the priorities and methodologies of the how are largely determined by the nature and quality of the environmental health workforce.”

The editorial also noted that *“the United States is spending billions to deal with environmental health issues, but there are not nearly enough public health trained practitioners to implement these programs.”*

And the editorial discussed the fact that *“past and current abrogation of public health leadership for educating environmental health practitioners has contributed to the widespread deficits of properly trained personnel. Individuals with little knowledge of epidemiology, biostatistics, toxicology, and risk assessment are filling key environmental health agency positions that would benefit from such knowledge.”*

The editorial further noted that: *“accredited schools and programs are not currently adequately addressing the need and potential market for undergraduate or graduate practitioners. Schools of public health, once the prime incubators for public health practitioners, have gravitated away from developing environmental health practitioners as they follow the money trail toward emphasizing basic science research and health care rather than environmental health practice.”*

In 1991, I developed a report funded by the Bureau of Health Professions through the Association of Schools of Public Health that included draft legislation designed to significantly increase funding for accredited schools and programs educating environmental health graduate and undergraduate practitioners. I attempted to gain support for political action from all the national environmental health and protection groups. None offered support.

http://www.sanitarrians.org/Gordon/Dear_Senator_Domenici.pdf

In the same era, the Department of Defense Deputy Secretary for Environment wrote that *“the shortage of properly qualified and trained environmental health professionals constitutes a major impediment to DOD's world-wide mission of environmental problem prevention and clean-up.”*

The 1993 “Report of the Committee on the Future of Environmental Health,” which I was privileged to chair, recommended that: *“--- schools of public health, other environmental health science and protection programs, academic accrediting bodies, and funding agencies should*

evaluate their efforts and the proven competencies of graduates. The dearth of effective environmental health and protection leadership must be addressed. Properly designed, targeted and effective education and training are not adequate to meet needs.”

And I wrote the Association of Schools of Public Health recommending that: *“Schools should be preparing students as practitioners in all environmental health roles including not only health departments, but all environmental health agencies ---. “Schools of public health should be encouraged to provide continuing education opportunities that are currently in extremely short supply. Personnel who do not take affirmative steps to remain current are soon out-of-date and ineffective. Operating agencies should require continuing education for their personnel.”*

As a co-author of the 1998 Report of the “Crossroads Colloquium” published in the Journal of Public Health Management Practice, we stated that: --- *“a dramatic need exists for improving the environmental health education and training of the health and environmental agency workforces. From field workers to decision makers, from secondary schools to postdoctoral education, improvements in education and training are critical to the continued success of the nation's environmental health programs.”*

The foregoing recommendations and others developed by the Congressional Office of Technology and the Department of Energy resulted in zero support or action by the environmental health community to ensure increased numbers of students for roles as environmental health professionals.

BUT NOW --- It has finally been recognized that the leadership workforce is aging and the pool of professional environmental health replacements is inadequate. There may not be a shortage of environmental health practitioners, as positions are being filled. However, positions are increasingly being filled by practitioners lacking environmental health training. Following years of inattention, it would now require years to develop the funding, faculty and facilities to commence the education and produce the necessary numbers of environmental health and protection professionals. I have no hope for such action at this point. **Although forewarned, the situation that should and could have been**

averted is now playing out in slow motion.

Environmental health leaders, agencies and associations have ignored the need to advocate environmental health policy and failed to market the comprehensive benefits of environmental health and the value of a workforce inculcated with the art and science of environmental health. Agencies and Associations have simply allowed events to evolve.
<http://www.sanitarions.org/Gordon/fable.pdf>

RECOGNITION

Environmental health and protection services are dependent on public and political support, and practitioners must consistently communicate with the public, media and political leaders to ensure understanding and support.

Public relations will be most successful when all personnel understand its importance and participate freely. Favorable media are vital factors in creating public interest and support, and in establishing a climate in which an agency can carry on its work most effectively. Because positive public information can be so rewarding, proper media relations are especially important.

Getting and staying in the news is not the easiest part of public information program, but it is well worth the effort for the effect is cumulative. A single "break" in the media will not bring the public to your doors. Remember, too, that one unfavorable story event will not ruin an agency's reputation. Public impressions are built over a long period of time.

http://www.sanitarions.org/Gordon/NM_not_inferior.pdf

http://www.sanitarions.org/Gordon/JEH_77.pdf

Many environmental health practitioners have been suspicious of the media and afraid to be open and work with them. This results in a negative type of public information program, as the media may not gather any news about the agency unless it is bad news, or the media only obtains news in response to direct questioning of department personnel. A few suggestions:

- Encourage numerous personnel to be involved in the public information program. This will lead to more interesting articles, more stories, more human interest, and better public relations.
- Build and promote the programs and the agency instead of an individual.
- Include editors and news directors in the department's

mailing list of key community leaders.

- Reporters prefer to write their own stories and receive information direct. News media receive countless numbers of "canned" news releases, and these usually go unnoticed. The personal touch is much more effective.
- Everything about an official agency should be open to the media unless legally prohibited.
- Make frequent contact with reporters covering your agency or functions. Go out of your way to impart information.
- Develop a calendar or timely seasonal information items.
- Have coffee with reporters, and tell them of your needs and problems as well as your successes.
- For major issues, request a conference with news editors to gain editorial support.

Do such things routinely and develop sound media relationships rather than expecting immediate support during an unforeseen emergency or adventure into the realm of controversial public policy.

Environmental health is the public's business, and will not be properly understood or supported in the absence of continuing public information to the media, target groups, citizen groups, professional groups, elected officials and other agencies involved in the field of environmental health.

I have found belief concerning the "invisible profession" to be unbelievable. If a given program or agency is "invisible," practitioners should re-evaluate their own attitudes, competencies and efforts. The fault is invariably with the messengers or their agencies rather than the messages. As Confucius said:

“Instead of being concerned that you have no office, be concerned to think how you may fit yourself for office. Instead of being concerned that you are not known, see to the (be?) worthy of being known.”

For years, my various agencies were extremely visible. We had TV, radio and print media messages emanating from a variety of departmental personnel several times weekly. Environmental health is of profound interest to the public. Blaming the media is often a feeble excuse, but other factors may be involved in a paucity of visibility. These include:

- Organizational settings that preclude support, understanding,

- emphasis and visibility for environmental health,
- Practitioners lacking necessary competency in their field of practice,
 - Organizational policies that preclude environmental health personnel being encouraged to practice good public information,
 - Practitioners not understanding and marketing the comprehensive benefits of environmental health, and
 - Practitioner inability to articulate and pursue a comprehensive vision of environmental health.

PROFESSIONALISM

A partial listing of those professionals and disciplines practicing environmental health and protection includes sanitarians, engineers, biologists, chemists, geologists, veterinarians, physicians, toxicologists, attorneys, public administrators, statisticians, epidemiologists, environmental health professionals, political scientists, educators, nurses, economists, planners, industrial hygienists, physicists, dentists, bacteriologists and ecologists, among others. Each is a vital component of the mosaic of professions and disciplines effectively applying their skills as environmental health and protection practitioners. Such practitioners range from sub-baccalaureate technicians through various doctoral level professionals. They are found in the public sector, the private sector, the voluntary sector, the educational sector and the research sector. Environmental health and protection is a profoundly complex, multifaceted, multidisciplinary, and interdisciplinary field of endeavor. Environmental health and protection is a field of practice in which to practice one's profession. <http://www.sanitarians.org/Gordon/profession.pdf>

This multidisciplinary and multiprofessional nature of the environmental health and protection workforce is a distinct strength and should be emphasized. Having a diversity of professions and disciplines in the field of practice leads to greater creativity and improved programs rather than a single profession “cookie cutter” approach.

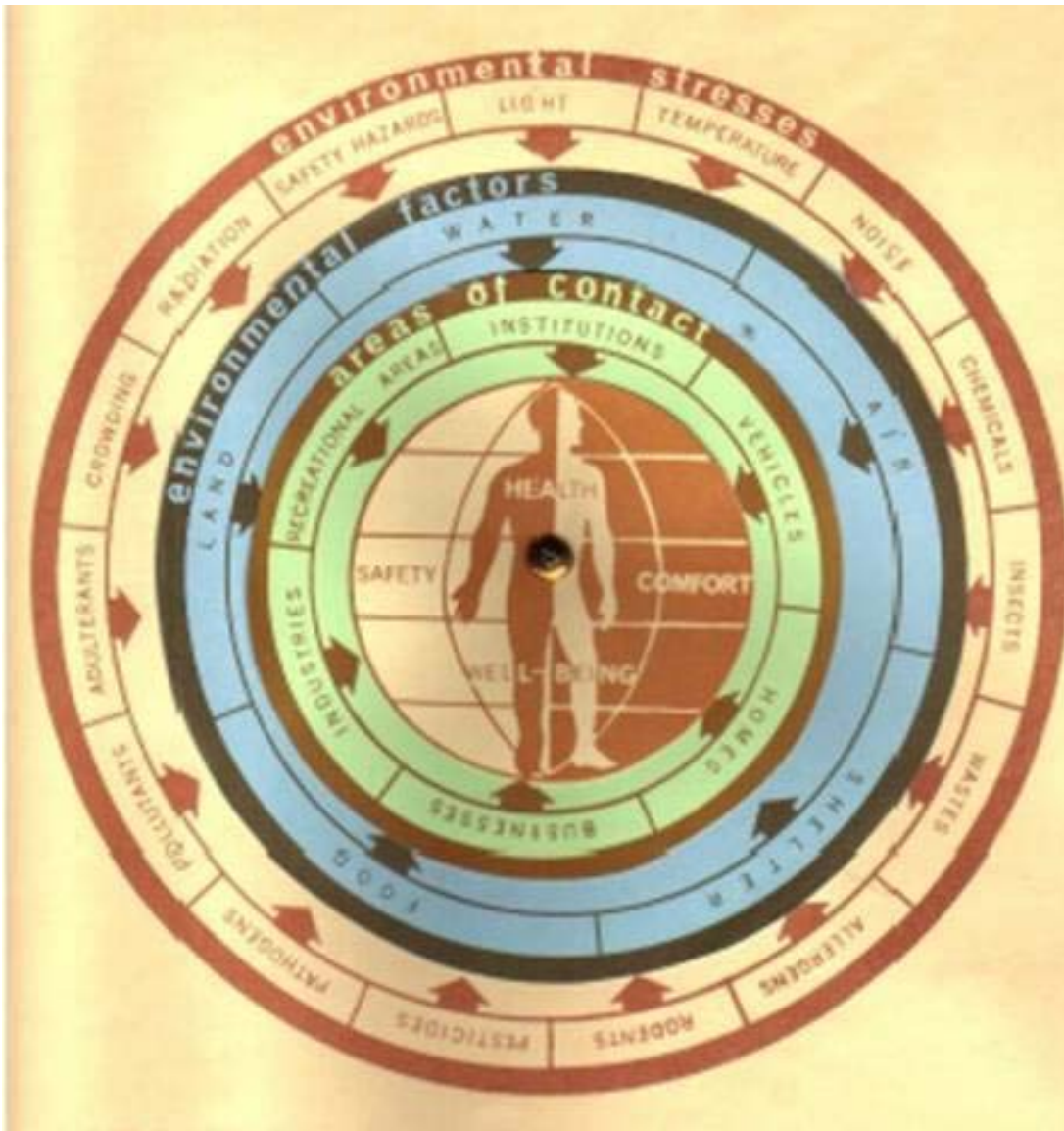
The road to professionalism is based on achievement and resultant recognition. Worrying about titles and registration is of little concern to the public and political leaders. Achievement is the prerequisite. http://www.sanitarians.org/Gordon/looking_for_love.pdf

EMBRACING ENVIRONMENTAL HEALTH AND PROTECTION

Environmental health and protection practitioners should embrace the comprehensive field of practice. Many educational programs, agencies, associations and practitioners have tunnel vision with regard to the breadth, depth and benefits of the field of practice. Too many feel it begins and ends in health departments, and self-serving definitions are disturbingly narrow. Environmental health and protection is practiced in scores of local, state and federal agencies; voluntary and professional agencies, as well as in the private sector. Academicians and practitioners should expand their horizons and stretch their imaginations. Important roles for professionals are manifold in scores of traditional as well as evolving problem areas.

Environmental health professionals should seek key leadership and other practitioner roles in the spectrum of environmental health and protection agencies at all levels, whatever the organizational titles.

There is no standard model for the organization and delivery of environmental health and protection services, and there are no data to indicate that one organizational or service delivery model is more effective than another in protecting public health and the environment. And contrary to any self-serving desires to create personnel in a professional's own image, there are no data to indicate that environmental health professionals provide more effective services than professionals in environmental health. All are necessary to the effective delivery of environmental health and protection services.



Larry Gordon abt 1968

POTENTIAL OF ENVIRONMENTAL HEALTH PROFESSIONALS

Most environmental health and protection professionals do not visualize or achieve their potential due primarily to inadequate competency in the **art** of environmental health and protection. There are no glass ceilings for those who have the requisite competencies, embrace the field of practice, have a comprehensive vision, understand and market the full range of benefits of environmental health and protection, and are willing to shoulder the responsibilities and controversies inherent in leadership positions.

Effective environmental health leadership is profoundly complex, frequently controversial, and invariably the result of individual capacity and initiatives. Many of our great environmental health leaders have been dedicated individuals who achieved eminence not because they had the right pedigrees or belonged to the right organizations, but because they had the right vision, the right information and the right leadership at the right time. Shattuck was a publisher, Chadwick was a lawyer, Winslow and Sedgwick were sanitarians, and Lasker was an advertising man. The mantle of leadership falls to those who earn it. Environmental health professionals have a solid record of achievement in a wide spectrum of roles in a variety of public, private and academic organizations. However, many environmental health professionals appear reluctant to engage in the controversies inherent in leadership. Most leadership positions do not offer career protection beyond the ability of an individual to earn the continuing respect and support of peers, subordinates, the public, the media and elected officials. http://www.sanitarians.org/Gordon/EH_Objectives.pdf

BENEFITS OF ENVIRONMENTAL HEALTH AND PROTECTION

Benefits have been discussed earlier in this paper, but are important enough to be repeated. As a group, environmental health and protection practitioners have failed to grasp and market the comprehensive benefits of environmental health and protection. Important benefits include:

- reduced disease and disability, yes, but also
- lower health care costs,
- enhanced community economic vitality,
- enhanced productivity,
- enhanced community educational achievement,
- fewer social problems, and
- enhanced quality of life in a more livable environment.

Failure to understand and market the comprehensive benefits has resulted in ineffective programs, major transfer of programs to agencies other than health departments and inadequate budgetary support.

ADVOCACY AND THE ART OF POLITICS

Advocacy for environmental health and protection is practiced by a diverse assortment of citizen groups, private sector groups, and official agencies.

I learned to strive for excellence by advocating new organizations and other public policy to better serve the public, and learned that environmental health and protection practitioners must lead in striving for changes in policies, programs, priorities, organizational patterns and laws rather than waiting for someone else to lead. I found it possible to develop new ordinances, statutes, agencies, and facilities that others had not envisioned or thought possible. Each presented obstacles to be overcome.

Policy is developed at all levels of the public and private sectors, but the most important policy issues are the responsibility of elected officials. Legislative bodies determine budgets, staffing, facilities, and legislation required for all activities. Those approaching legislative bodies who have not developed a vision, who are not known for leadership, and who have not practiced good public relations will probably not be successful in their policy quests.

A few thoughts about venturing into policy:

- Politics determine who gets what, when and why. The results are policy.
- Every policy issue is deemed "critical" by someone, so justification must be specific as to how the action will impact environmental health in the individual politician's area.
- Legislative matters are determined primarily by legislative committees, and lobbying efforts should be targeted committee members. Staff members often play key roles in influencing committee members.
- Elected officials focus on the needs and desires of their own constituents. A case must be made to indicate the impact of the policy recommendation on such constituents.
- Elected officials are much more likely to be influenced by thoughtful, individually worded letters rather than by "canned" letters and postcards that are usually ignored as emanating from a single source.
<http://www.sanitarians.org/Gordon/DearMrPresident.pdf>
- Requests will be more effective if the practitioner indicates the specific environmental health problems (indoor air, community air, safe drinking water, water pollution, food, industrial hygiene, vector control, noise pollution, land use,

radiation, solid wastes, hazardous wastes, toxic chemicals, etc.) being impacted.

- Make every attempt to relate the impact of the action to one or more of the benefits of environmental health previously listed.
- Practitioners who have developed an ongoing relationship with elected officials rather than waiting for a perceived "emergency" are more likely to have their requests considered.
- Practice public relations with your elected officials. Many practitioners disdain what they consider "politics," but outreach to politicians helps them understand and address the needs of their constituents. Meet elected officials in person. Give them tours of their districts identifying environmental health problems that have been ameliorated or need action. Create maps of their jurisdictions indicating the locations of environmental health problems.

Elected officials receive masses of requests daily, so only the well justified requests will be seen by the politician rather than by some aide. U.S. Senator Robert Stafford, Chair of the Senate Public Works and Environment Committee, advised a national group I was chairing that an elected official paid just as much attention to a well crafted letter from a constituent as an expensive formal document developed by an industry or voluntary group. Many groups engage in such **ineffective** actions as monitoring, supporting, endorsing, watching, following, etc., rather than defining problems and solutions, marketing, lobbying, testifying, developing legislation, and gaining policy enactment. **Some such groups serve as cul-de-sacs for enthusiasm, action, vision, ideas, and fiscal support.**

LEADING CHANGE, OR BEING LEFT BEHIND

I will discuss a sample of my policy wins and losses to indicate that environmental health professionals can lead, rather than abdicating responsibility for untended issues for others to claim.

My early policy adventures involved such issues as air pollution, radiation exposure, housing conservation and rehabilitation, urban renewal, land use, water supplies, liquid waste disposal, occupational health and safety, water pollution, municipal annexation, agent orange disposal, the Council on Environmental Quality, a DDT

fiasco, outrage over a paper mill, disposal of shoe-fitting fluoroscopes, banning plastic garment bags lacking warning labels, controversy over uranium milling, solid waste management, prohibiting smoking in agency buildings long before such policy became the norm, as well as the creation of several agencies.

THE MUNICIPAL HEALTH ACT: A WIN

Early New Mexico law specified that "municipalities and school districts may employ their own health or sanitation personnel but they shall report to, and render such reports to, the District Health Officer as he may deem necessary." I ignored this provision as our funding was from the city, and the department was part of city government just as certainly as were all other city departments that were not required to report to state government.

But this law was creating turf jealousy for a series of district health officers who, believing in textbooks and tradition, thought they should supervise the city's environmental health functions even though none had adequate education or experience in environmental health. Each of these district health officers ended their New Mexico careers by resigning in frustration. I was not their favorite lackey, and it was time for a policy adventure.

I developed a bill that moved through the legislative process with no apparent opposition, until the State Health Officer decided it was a serious threat to his turf. After over-imbibing at a dinner, he smilingly advised, "*Larry, I'm going to pull the rug out from under you!*" The municipal health bill afforded him this opportunity. He managed to have the bill recalled to committee in order to bury it. I contacted a number of influential private sector individuals. With their support, the bill was again given a "do pass" by committee, enacted by the Legislature and signed by the Governor.

The State Health Officer subsequently submitted nine questions to the Attorney General designed to elicit interpretations that would weaken the Act. The AG's responses were all favorable to the interests of municipal government.

Nineteen sixty-five was long before the public developed interest in environmental health issues. The only significant interest was that of environmental health professionals. For example, I appointed a blue ribbon,

seven-member Advisory Committee, later gained enactment of an advisory board ordinance, and did not have a single request or nomination for someone to serve on the board.

This was prior to Earth Day, public awakening, the creation of EPA, and the passage of major Federal and State environmental legislation.

Working with the County Manager, I developed a proposal to have the surrounding county contract with the city for all environmental health services. The contract was submitted as a joint powers agreement and approved by the County Commission, the City Commission, the State Board of Health and the State Board of Finance.

The result was the Albuquerque-Bernalillo County Environmental Health Department -- the first such entity in the nation!

Earlier, I developed several new environmental health ordinances for the City. For the county, I developed the County Environmental Health Code, which was a comprehensive document encompassing such issues as subdivision requirements, water and sewage standards, swimming pool sanitation and safety, milk sanitation, food protection, air pollution control, and meat inspection.

AIR POLLUTION CONTROL IN ALBUQUERQUE AND NEW MEXICO: WINS

Topography and meteorology had long made Albuquerque a natural for air pollution in winter months. I developed an arrangement with the Public Health Service to continuously sample air for particulates, including chemical composition. The PHS furnished monitoring equipment and analysis. The news media cooperated by portraying the results. I frequently met with various community and professional groups to discuss the problem and indicate the need for controls. Point sources were still common, and open-burning of wastes, refuse, weeds, and agricultural stubble was widespread. I worked with a reporter who wrote a series of front page feature articles that accurately described the problem and the need for an effective approach. I commenced developing a new ordinance. The county commission also became interested in developing an ordinance.

Following extensive public information, we scheduled a public hearing on the proposed ordinance. We had a large, practically empty room.

Those in attendance included one newspaper reporter, one TV cameraman, and two of us from the Department. I proceeded with preliminary efforts to schedule the proposed ordinance for commission action.

Then the sky fell in! I was invited by representatives of the Chamber of Commerce and the Industrial Development Service to attend a closed-door session. They demanded that I back off, and advised me that to even talk about air pollution in Albuquerque would devastate the economy and drive industry out of the area. One even suggested that I should be "*tarred and feathered and ridden out of town on a rail.*"

It was not a pleasant experience! But, as Winston Churchill admonished, "*If you are going through hell, keep going.*" I scheduled the ordinance for action by the city and county commissions. Both adopted the ordinances within a few months.

I then worked with the State Division of Sanitary Engineering and Sanitation to develop a State law. The first bill was introduced by a Representative who received so much pressure from polluter interests that he dropped sponsorship and the bill died in committee.

In the next session of the legislature, a Senator introduced the bill again, but dropped sponsorship due to the pressures of power plants in his jurisdiction.

Next, I requested another Senator to sponsor a bill that moved to a hearing before the Senate Conservation Committee. At this hearing, Senators said they thought air pollution was green: the color of money. The hearing rapidly deteriorated as other senators laughed me out of the room. I was not sure if there was a formal "do not pass" vote, or if they just reported out the laughter!

Subsequently, a group of industry officials developed a draft bill that was extremely weak and polluter oriented. They submitted it to the State Board of Public Health for endorsement. Board members were so pleased that the bill provided for enforcement by the State Department of Public Health that they failed to notice its weaknesses. The Board unanimously endorsed the draft bill. That inappropriate endorsement precluded the state-level Sanitary Engineering and Sanitation staff from opposing or attempting to improve the measure and meant that I was the only advocate having the

freedom to push for a stronger and more effective measure.

I then requested a Senator to introduce a measure I had drafted. It passed the Senate with little opposition. But the groups opposing it had decided to deal with it when it moved to the House. A committee substitute was passed out of the first House committee.

But the polluter interests showed their muscle. At one hearing, the Chair said he needed to leave the room for a few minutes and would just turn things over to the excellent industry lobbyist, who was a respected adversary. At a joint House-Senate Committee hearing, an environmental activist (the first I had come across), said that he would rather *“live in a cave and use candles than tolerate the Four Corners Power Plant.”* That statement certainly didn't help my cause, and engendered a huge smile on the face of the president of the Neanderthal-minded power company.

Following many hearings and compromises, a good bill was developed, and signed into law. Politics is indeed the art of compromise.

I was equally involved in development and enactment of the New Mexico Water Pollution Control Act during the same legislative session. The intrigue was basically the same as it was for the air act. Both final products were good legislation. The legislative process worked after several failed attempts in three previous legislative sessions.

SOLID WASTE ADVENTURES: A LOSS

City commissioners thought the Environmental Health Department was doing such an excellent job that they transferred the Refuse Department to Environmental Health without consulting me. I never believed that Environmental Health should administer direct services, but this provided memorable adventures --- and a loss.

One of the adventures was an idea whose time had not arrived. I contacted every unit of local government, every school district, and pueblo in the region regarding area-wide solid waste management problems and developed an area-wide solid waste management plan. I contacted the solid waste management officials in the Public Health Service and described our proposal. They professed to be eager to fund such an area-wide program as a demonstration project for other areas of the Nation.

The PHS had already utilized our department for other demonstration projects, including development of their methodology and resultant publication for community environmental health planning. Working with the PHS, I had previously directed the nation's First Governor's Conference on Environmental Health Planning. And as a PHS Commissioned Officer, I had been among those responsible for radioactive fall-out monitoring and environmental health and protection during nuclear testing operations.

Our plan involved creating a solid waste management district with initial financial contributions from the afore-listed local governments with the bulk of funding to be received from the PHS in accordance with an oral commitment. Solid waste transportation was to be based on using some 50 miles of existing railroad tracks, with refuse trucks feeding into this system.

I convened a meeting of all regional local government officials at which all signed an initial agreement to participate financially. Local enthusiasm was high. I again contacted the PHS solid waste management officials, as we were ready to go. But by then there had been a change in federal priorities and they declined to fulfill their earlier commitment.

An excellent idea, good planning and excellent local support, but withdrawal of the promised federal support resulted in no further area-wide solid waste management efforts.

The city refuse department provided other adventures. The personnel were politically formidable, and to a significant extent controlled operations. They had an effective "buddy" system that protected them from unwanted interference. I found that the crews of the large and expensive-to-operate refuse vehicles completed their routes early in the day and spend the rest of the working day driving around appearing to be busy. On one occasion, I observed a crew parked on a side street drinking beer. These practices not only resulted in exorbitant personnel costs, but in high mileage costs. I started transferring crew members to different crews, and changing some day crews to night work. I paid for this by repeated anonymous calls threatening to ***“kill me, injure my family members and rape my wife!”***

The results of my changes were short-lived. About that time, I was invited to become Director of the Environmental Services Division of the New Mexico Health and Social Services Department. Following my resignation from city government, the entire solid waste system and

assignments reverted to previous arrangements within a week after I left. The results were comparable to sticking my hand in a bucket of water and then withdrawing it. The water level did not permanently change. But, a leader must learn to go from failure to new adventures with no loss of enthusiasm.

MORE WINS

When I first left the Albuquerque-Bernalillo County Environmental Health Department, we had developed a highly respected, nationally recognized, professionally staffed city-county department. We had significantly increased staffing. Activities included food sanitation, pure food control regulating all food processors within New Mexico that shipped into Albuquerque, milk sanitation regulating all dairies and milk plants in New Mexico that shipped into Albuquerque, safe drinking water, liquid waste disposal, air pollution control, cross-connection control, swimming pool safety and sanitation, housing conservation and rehabilitation, animal control, subdivision control, community noise abatement, meat and slaughterhouse inspection, radiation protection, industrial hygiene, insect and rodent control, and solid waste management. We had also promoted, designed and spawned the City Urban Renewal program and had been significantly involved in developing the Model Cities program and the Low-rent Leased Housing Program.

THE E.P.A.: A WIN.

By 1970, the public and many political leaders had become increasingly concerned about environmental deterioration. Instant activists, sometimes called "Tang Ecologists," literally came out of the woodwork. They were sometimes supportive, frequently disruptive, occasionally knowledgeable, and often woefully misinformed. But they did provide some balance to the efforts and political power of major polluters. Sometimes they made our efforts easier, often more difficult. They rapidly became a political force with which to be reckoned.

The primary federal responsibility for environmental health was lodged in the Consumer Protection and Environmental Health Service of the Public Health Service, except that water pollution control was in the Department of Interior, pesticide regulation was in the Department of Agriculture, and food protection was in the Food and Drug Administration.

The Senate Committee on Environment and Public Works held hearings regarding environmental problems and organizational approaches.

The committee was concerned that the PHS was more interested in research than rapid action to address the nation's environmental ills. One prominent Sanitary Engineer had noted that the Public Health Service had left environmental health *“halfway between leprosy and the quarantine station.”*

As Chair of the American Public Health Association Section on Environment at the time, I scheduled a meeting with the staff of President Nixon's Advisory Council on Executive Organization. We testified and made a series of recommendations on behalf of the APHA Section on Environment. http://www.sanitarians.org/Gordon/EPA_creation.pdf

When President Nixon created EPA by Executive Order, many of our recommendations were heeded, but EPA was not as broad in programmatic scope as we had recommended. But perhaps we kept EPA from being assigned to the Interior Department, as this would have been a blatant conflict of interest -- submerging EPA under programs devoted to resource utilization.

EPA is primarily a public health agency. Few of its programs would be authorized were it not for their public health bases. http://www.sanitarians.org/Gordon/Barn_doors.pdf

THE N.M. ENVIRONMENTAL IMPROVEMENT AGENCY: A WIN

Until 1970, organization of state environmental health services had not been of concern to the public. Public and political clamor throughout the nation helped instigate a widespread re-evaluation of environmental problems, program goals, program scope, program methodology and effectiveness, fiscal support and legislation, as well as program organization and institutional arrangements. Without much real study or understanding, programs in many states were shifted to new and/or different agencies for a variety of reasons -- some valid, some questionable and some irrational.

Sometimes it was change for the sake of change. Eager environmental advocates sometimes confused change with progress. In most states, environmental health program officials 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 progress through

repeated reorganizations, and to place environmental health personnel and agencies in positions of greater "political responsiveness."

The EPA was touted as a model for states, and this in turn led to further undesirable program fragmentation in those states imbued with the naive desire to follow the federal "model." It was interesting to note that while the Congress approved the Presidential Executive Order establishing the EPA, practically all Congressional hearings criticized the proposal on the basis that it was not truly comprehensive.

Unfortunately, many citizen leaders mistakenly identified air, water, and wastes as "the environment." While air, water and wastes are important environmental health problems, they are only a portion of problems to be addressed and should not be diversified from other environmental health issues. Such diversification typically results in program gaps or duplication, competition over the environmental health program dollar, public confusion regarding the roles and responsibilities of the various agencies, program inefficiency and ineffectiveness, and a general disservice to the public and the environment.

In New Mexico, we were able to take a comprehensive approach. One reason was that I was already the Director of the Environmental Services Division of the Health and Social Services Department. This Division was already organized, respected, and functioning effectively. Another was the division's professional staff. And another was that we chose to lead change rather than defending the status quo.

While I was changing planes in O'Hare Airport one evening, I noticed the Governor-elect. I was aware that he had campaigned to institute a new organizational arrangement for environmental health programs, but I assumed he probably didn't have a precise model in mind. I had not previously met him, so I introduced myself and asked if he would be receptive to a detailed proposal. When I returned to my office, I wrote the Governor-elect http://www.sanitarrians.org/Gordon/Creating_NM_EIA.pdf listing organizational possibilities, recommending comprehensive program scope, outlining a number of basic principles, and requesting that I be named Director of his new agency.

In the next legislative session, the Governor had a State Representative contact me to discuss the program scope, organization,

mission, goals, and budget for the proposed agency. The Representative decided to rely heavily on the Environmental Services Program Guide that I had previously developed, and worked with me and the Legislative Council Service to draft a bill. Even though it was 1971, there was no environmental activist involvement regarding the bill.

The Governor signed the bill into law, and I was appointed Director of the New Mexico Environmental Improvement Agency.

The statute we developed to create the New Mexico Environmental Improvement Agency provided the framework for the most comprehensive state environmental health agency in the nation. Statutory authorization was provided for programs dealing with air pollution, water pollution, food protection, milk sanitation, insect and rodent control, occupational health and safety, injury prevention, radiation protection, safe drinking water, swimming pool safety and sanitation, solid waste management, environmental chemicals, recreational environmental management, institutional environmental management, as well as hazardous substances and product safety.

THE N.M. SCIENTIFIC LABORATORY SYSTEM: A WIN

The New Mexico Public Health Laboratory had been built in 1937. The facility became overcrowded, dirty and vermin infested. Equipment and supplies were in short supply, as were budget and professional capacity. Morale was low, and laboratory results were frequently of questionable validity.

I developed a policy proposal justifying 1) an organization to be known as the New Mexico Scientific Laboratory System, and 2) a modern, well equipped laboratory facility.

In the 1973 Legislature, I requested funding for the facility and obtained Board of Regents approval to locate it on the UNM campus. The legislative process was not smooth or easy, and at one point the request was entirely deleted in a late night Senate Committee hearing. I drove the sixty miles home after midnight weary and frustrated. But by 7:00 the next morning, I was back in the Capitol to start the process anew in the House. An allocation for construction was finally authorized.

I subsequently requested appointment as Director of the New Mexico

Scientific Laboratory System in order to organize and set the mission and policies for the new organization.

My troubles had only begun when construction commenced. The architect allowed numerous cost overruns, and the State Property Control Division did not prevent or control the overruns. The project was soon out of money and I had to return to the Legislature for a supplemental request. This supplemental request certainly wasn't popular with the legislators, but additional funding was finally allocated. It was a difficult, stressful project, but in retrospect it was worth it. New Mexico citizens were served by one of the most modern, well equipped and best staffed laboratories in the nation.

The scientific laboratory system was, and is, unique. The organization and facility were designed to provide laboratory services to all tax-supported federal, state, and local agencies in New Mexico requiring such services on a cost reimbursement basis. Other states have individual, often inadequate, laboratories serving individual client agencies such as public health, environmental protection, substance abuse, occupational health and safety, game and fish, family planning, medical investigator, highway traffic safety commission, etc. By taking a comprehensive approach, we were able to provide a superior organization, facility, equipment and services for our citizens.

We improved training, quality control, organizational arrangements, supervision, client relationships, budgets, and inter-agency communication and coordination. Many states attempted to emulate the New Mexico model, but have found it impossible to overcome the influence of their pre-existing, fragmented laboratory organizations and various "turf" imperatives.

OTHER WINS AND LOSSES

http://www.sanitarrians.org/Gordon/Examples_Move_the_World_LJG_101406.pdf and <http://www.sanitarrians.org/Gordon/EHAdventures.pdf>

Larry Gordon, M.S., M.P.H., D.H.L., D.E.A.A.S., has devoted almost 60 years to environmental health including roles as a county sanitarian, district sanitarian, state sanitarian, chief sanitarian in a municipal health department, founding director of a city-county environmental health department, PHS consultant, PHS Commissioned Officer, frequent lecturer for CDC training courses, director of the first Governor's Conference on Environmental Health Planning, founding director of a state environmental agency, founding director of a state scientific laboratory system, president of the American Public Health Association, state cabinet secretary for health and environment, chair of the national Committee on the Future of Environmental Health, visiting professor of public administration, senior fellow of a university institute for public policy, and adjunct professor of political science.

He was one of the 12 Founders and is one of five Diplomates Laureate and one of five Diplomates Emeritus of the American Academy of Sanitarians. He is a recipient of numerous state and national professional awards, as well as an Honorary Doctorate in 2007.

He was a founder of the Council on Education for Public Health, as well as a long time member of the National Environmental Health Science and Protection Accreditation Council.

He developed, testified and gained enactment of numerous state and local environmental health measures, testified before the Presidential Committee on Executive Reorganization regarding the creation and scope of EPA, and testified before Congressional Committees regarding several major environmental health issues.

He has over 240 publications and policy papers, many of which may be accessed at:
<http://hsc.unm.edu/library/development/endowment/Gordon/index.shtml>
and http://www.sanitarians.org/sanitarian_resources.htm