



The University of New Mexico  
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August 22, 1988

**The Honorable Pete Domenici U.S. Senator**

**SD-434**

**Washington, DC 20510**

**Dear Senator Domenici:**

**The Congressional Office of Technology Assessment recently concluded that:**

- shortage of experienced technical experts in several fields may explain a lack of quality performance now and it may cause a major bottleneck in an expanded superfund program; and**
- current educational programs may not be able to prepare sufficient numbers of some professionals.**

**A recent report by the Department of Health and Human Services' Bureau of Health Professions (BHPr), using available data and an expert panel of employers and educators concluded that there are shortages of:**

- hazardous materials specialists;**
- institutional environmental health practitioners;**
- water and wastewater personnel;**
- food protection personnel; and**
- personnel in solid waste, housing, vector, and injury control fields.**

**The BHPr report estimated there were 715,00 persons employed in professional and technical positions in the environmental health work force in 1987:**

- 80,000 (11 percent) have formal education in environmental health;**

**-155,000 (22 percent) are professionals with relevant skills (i.e., engineers and chemists) who are conducting environmental health activities, but who have no training in public health; and**  
**-40,000 of the 235,000 professionals (17 percent) are inadequately trained.**

**In addition to the current professional work force of 235,000, the expert panel estimated a need for 120,000 more professionals in order to address problems related to:**

- water supply;**
- indoor and outdoor air;**
- hazardous waste;**
- food supply; and**
- preventing injuries in homes and at the work site.**

**Obtaining a graduate level education is expensive. Educators report extensive student interest in environmental health but low enrollments because of lack of student stipends. Currently there are only 1,500 graduates nationwide each year in environmental and occupational health programs. This will replace only 0.6% of the work force due to deaths, retirements and other losses to the field annually. If we are to expand these programs, additional faculty and curriculum must be developed. If quality is to be maintained, good accreditation processes for these programs must also be continued and improved.**

**The diversity of specialties and educational programs suggests that certification of individuals by specialties will be necessary in order for employers to be able to hire quality persons that meet their specific**

**needs. Currently, positions are being filled by many who are inappropriately educated. This is occurring not just in state and local health departments, but in other environmental health organizations. The impact is deleterious to health, the environment, as well as economic business interests.**

**While the private sector plays a very important role, protection of the environment is primarily the responsibility of the various levels of government. Most of the environmental health activities at the state and local levels are matters of national policy and are mandated by federal requirements. Therefore, solving the work force problems identified above should be a governmental priority. Experts at the recent workshop stated that "government has failed to provide the leadership ...for developing the supply of properly trained personnel that is essential for effective and comprehensive program management."**

**It is, therefore, recommended that legislation be developed that will solve the problems of preparing an adequate environmental health work force. Legislation should authorize student support, faculty and curriculum development, and improved accreditation and certification mechanisms. Appropriations for this legislation could be obtained by directing the Environmental Protection Agency and the U.S. Public Health Service to spend at least 1% of all appropriated dollars in the various environmental laws, for the education and training of personnel.**

**The Nation is spending billions of dollars to clean up our environment, but there are not nearly enough qualified persons to implement these programs. Lack of attention will probably result in a worsening of the present crisis.**

**I hope you will see fit to sponsor legislation to correct these serious environmental health education shortages.**

**Best regards,**

A handwritten signature in black ink, appearing to read "Larry". The signature is written in a cursive style with a large initial "L" and a trailing flourish.

**Larry Gordon**

**Visiting Professor of Public Administration**