



GERALD J. KARCHES, M.S.
Retired CEO

EXPERIENCE

Mr. Karches started work with the U.S. Public Health Service (USPHS) as a commissioned officer in 1956. During the twenty-two years in the service he planned, organized, and directed many field operations involving assessment of hazards from radiation to broader public health and safety issues. Examples included developing procedures to determine contamination levels from naturally occurring radiation, weapons testing fallout, nuclear power reactors, radioactive and mixed waste disposal, industrial uses in radiography and nuclear medicine. The concern was for the worker, the patient, the general population and the environment. These activities involved working with a wide range of disciplines such as physicians, engineers, scientists, industrial hygienists, safety professionals, and public health officials. He had responsibility for budgeting and cost accounting of the projects he managed.

Mr. Karches transferred to the newly created National Institute for Occupational Safety and Health (NIOSH) in 1971. As part of his USPHS experience he served as assistant division director for the Division of Technical Services. A significant part of this work experience was acting as the program manager to develop information on hazards in over 45 industries. This work resulted in the publication of over three million copies of guidelines and references. In addition, there were ten worker safety booklets developed relating to work practices in various occupations and respiratory protection guidelines for employers and employees.

In 1979 Mr. Karches joined the Arizona Center for Occupational Safety and Health at the University of Arizona. For four years he was responsible for coordinating training and education programs for workers and management in copper smelting, electronics, building trades and the Navajo Nation. A comprehensive safety and health program was developed for the Navajo Nation which included classroom training and field investigations of hazardous sites on the reservation.

Mr. Karches formed *Southwest HAZARD CONTROL, Inc.* in 1982 as an industrial hygiene, health physics and safety consulting company that provided remediation of hazards. Within two years the firm developed capabilities in asbestos abatement and in 1985 became active in providing hazardous material remediation services. He is consulted and contributes ideas on the overall direction and management of the company. At this time he does not participated on a daily basis to the management of the company.

EDUCATION:

- ◆ University of Pittsburgh, 1961, M.S. Hygiene
- ◆ Xavier University, 1956, B.S. Physics

CERTIFICATIONS/TRAINING:

- ◆ Certified Hazard Control Manager #1877
- ◆ DOE "L" Clearance

AWARDS & ACCREDITATIONS:

- ◆ Outstanding Achievement, 1975, U.S. Public Health Service
- ◆ Commendation Medal, 1978, presented by U.S. Public Health Service, Dept. of Health, Education and Welfare.

ASSOCIATIONS:

- ◆ Arizona Health Physics Society, Past President
- ◆ National Asbestos Council, Past President Arizona Chapter
- ◆ American Industrial Hygiene Assn., Past President AZ Section, Board of Directors
- ◆ American Subcontractors Association
- ◆ American Conference of Governmental Industrial Hygienists
- ◆ Southern Arizona Environmental Management Society (SAEMS)
- ◆ Environmental Information Association (EIA)
- ◆ Arizona Builders Alliance



PUBLICATIONS AND PRESENTATIONS

1. Assembly and Operation of a Low-Level Counting Facility. B.M. Branson, G.R. Hagee, A.S. Goldin, G. J. Karches, and C. P. Straub. J. Am. Water Works Assoc. 51: 438-448 (April 1959).
2. Instruments of Detection and Identification of Radioactivity in Environmental Media. G. J. Karches, B.M. Branson, and C. P. Straub. SEC Technical Report R60-3 (1960).
3. Determination of I, Cs, and Ba in Fluid Milk by Gamma Spectroscopy. G.R. Hagee, G. J. Karches, and A.S. Goldin. Talanta 5:36-43 (1960).
4. An Evaluation of Two 4" x 4" NaI(Tl) Detectors Used for Low Level Environmental Samples. B.M. Branson, G. J. Karches and G. I. Coats, Proc. of the Total Absorption Gamma-Ray Spectroscopy Symposium, Gatlinburg, Tennessee, May 10-11, 1960.
5. Environmental I-131 in Children, H. N. Wellman, W. Hansen, G. Laurer, G.J. Karches and J. Fooks, in Radioactivity in Man, G.R. Meneely and Shirley Motter Linde, eds., Charles C. Thomas - Publisher (1962) pp. 27-34.
6. Rapid Methods for Estimating Fission Product Concentrations in Milk. B. Kahn, G. K. Murthy, C. Porter, G.R. Hagee, G.J. Karches and A.S. Goldin. Public Health Service Publication No. 999-R-2 (1963).
7. Some Limitations of Available Radioactive Standards. H. E. Kolde and G.J. Karches, Health Physics. 10: 635-641 (September 1964).
8. Accuracy and Sensitivity of Film Measurements of Gamma Radiation Part IV. Al Broadsky, A. A. Spritzer, R. E. Feagin, F. J. Bradley, G.J. Karches and H. I. Mandelberg. Health Physics 11: 1071-82 (October 1965).
9. High Sensitivity Low Background Gamma Spectrometry System Design Through Initial Results. B.M. Branson, G.J. Karches, H. E. Kolbe, R. K. Stoms, B. Kahn and C. P. Straub, Health Physics 11: 1083-90 (October 1965).
10. Iodine-131 in Children's Thyroids from Environmental Exposure. H. N. Wellman, G.J. Karches, W. G. Hansen, G.R. Laurer, M. Eisenbud and J. Fooks. Public Health Service Publication No. 999-Rh-14 (July 1965).
11. A Sensitive Technique for Measuring Thyroidal Uptake of Iodine-131. H. N. Wellman, T. B. Yeager, G.J. Karches and J. G. Kereiakes. Journal of Nuclear Medicine 8:86-96, 1967.
12. Radio-assay Procedures for Environmental Samples. Geneva S. Douglas, Editor. Environmental Health Series, Radiological Health, U.S. DHEW, Public Health Service, NCRH. Contributor to Section 1, "Instrumentation" (January 1967).
13. Cesium-137 Body Burdens and Biological Half-Life in Children at Tampa, Florida and Lake Bluff, Illinois. G.J. Karches, J. K. Wheeler, G. L. Helgeson and B. Kahn. Health Physics, Pergamon Press, Vol. 16, pp 301-313 (March 1969).
14. Chronic Effects of Low Level Helium-Neon Laser Irradiation. Arnold I. Goldman, Russell L. Carpenter, and Gerald J. Karches. Proceedings of Fourth Annual Midyear Topical Symposium, Health Physics Society, January 28-30, 1970 (BRH/DER, March 1970).
15. Radiological Surveillance Studies at a Boiling Water Nuclear Power Reactor. Bernd Kahn, Richard L. Blanchard, Herman L. Kreiger, Harry E. Kolde, David B. Smith, Alex Martin, Seymour Gold, William J. Averett, William L. Brinck, and Gerald J. Karches. Technical Report of the Division of Environmental Radiation, Bureau of Radiological Health (BRH/DER, March 1970).
16. Field Determination of Dose from Xe in the Plume from a Pressurized Water Reactor. Gerald J. Karches, Harold Kolde, William L. Brinck, Ronald E. Shearin, and Charles R. Phillips. Presented at the International Symposium on Rapid Methods for Measuring Radioactivity in the Environment. Jointly sponsored by the IAEA and the Federal Republic of Germany. (July 1971)
17. The Role of the National Institute for Occupational Safety and Health in Industrial Radiation Safety, Radiation Safety and Protection in Industrial Operations. J. Karches, Editor Herber F. Klein, October 1972. DHEW Publication No. (FDA) 73-8012, BRH/DEP 73-3. Proceedings of a Symposium held on August 16-18, 1972.
18. Revised Recommended Asbestos Standard. R. A. Lemen, J. M. DeMent, J. K. Wagoner, Served on the NIOSH Review Committee K. Bridbord, D. H. Groth, G. J. Karches, Lucas, J. H. Wills. December 1976. DHEW Publication No. (NIOSH) 77-169.
19. A Report on Electromagnetic Radiation Surveys of Video Display Terminals. C. E. Moss, W. E. Murray, W. H. Parr, J. Jessite, and G. J. Karches, December 1977. DHEW (NIOSH) Publication No. 78-129.
20. Safety and Health Reference Handbook for the Food and Beverage Industry, Norman S. Buell, Mitzi M. Bosley, Gerald J. Karches. Publisher Willard S. Bosley, Bosley Corp. 1979
21. Department of Labor Seminar on Safety and Health at the Workplace, co-sponsored by the Ministry of Labor of Yugoslavia. Held in RIJEKA October 26-31, 1979. Presented paper and discussion on non-ionizing radiation.
22. Radiation Hazards from VDT's, presented January 1, 1983. Tucson Marriott Hotel ASSE-AIHA Conference.
23. Asbestos Abatement Regulations and Recommendations, presented in 1986. National Utility T&S Education Assn. Safety Skill Service. San Antonio, TX.
24. Asbestos Encasement - Unique Technology for Solving Asbestos Problems in Buildings, Presented at the National Asbestos Council Fall Technical Conference, New Orleans, September 22-24, 1986.
25. Advice for the Industrial Hygienist in Asbestos Abatement, Applied Industrial Hygiene ACGIH, July 1987.
26. Proper Asbestos Abatement Techniques and Respirator Selection, Gerald J. Karches, James C. Faas. Sept. 1987.
27. Asbestos: The Hazardous Fiber, Contributed Chapter 8-"Personal Protection". January 1990.



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The following 46 standard industrial classifications of businesses were visited by Mr. Karches and field representatives of NIOSH. Prevalent safety and health issues are discussed in the listed publications. Millions of copies of these publications were distributed to the businesses identified.

Bulk Petroleum Plants
Grocery Stores
Retail Bakeries
Auto Repair and Body Shops
Service Stations
Grains Mills
Electroplating Shops
Retail Lumber and Building Materials
Plastic Fabricators
Laundries and Dry Cleaners
Fluid Milk Processors
The Printing Industry
Bottled and Canned Soft Drink Facilities
Wooden Furniture Manufactures
Metal Stampings Operations
Paint and Allied Products
Food Processors
Concrete Products Industry
Paperboard Container Industry
Hotels and Motels
Millwork Shops
Auto and Home Supply Stores
Farm and Garden Machinery
Scrap Processors
Signs and Advertising Display
Eating and Drinking Places
Manufacturers of Industrial Trucks and Tractors
Commercial Roofing Industry
Arch Welding and Gas Welding and Cutting
Plumbing, Heating and Air Conditioning
Foundries
Manufacturers of Toys, Games, Amusements and Recreational Goods
Prefabricated Wooden Building Manufacturers
Screw Machine Products
Automotive Parts Recyclers
Tanning Industry
Pesticide Formulators
Meat Packing, Poultry Dressing, and Sausage Manufacturers
Sawmills and Planning Mills
Lighting Fixtures
Tool, Die and Precision Machining Industry
Miscellaneous Chemical Products
Metal Furniture and Mattress Manufacturers
Metal Coating and Allied Services
Plywood and Veneer Mills
Construction and Related Machinery Manufactures

Mr. Karches was also responsible for the development and publication of the following booklets on specific health issues or workplace situations:

Carcinogens - Working With Carcinogens
A Prescription for Battery Workers
Good Work Practices for Electroplaters
Working Safely With Pesticides
Urethane Foams, Good Practices for Employees' Health and Safety
The Way to Safety and Health for Textile Finishing Workers
Spray Painting Good Practice for Employees
Fiberglass Lay-up and Spray-up
Respiratory Protection-An Employer's Manual
Respiratory Protection-A Guide for the Employee