

**RÉSUMÉ OF
STANLEY G. COTHRIN**



EXPERIENCE:

1994 - Present

Director of Safety and Health, ASARCO Incorporated, Salt Lake City, Utah.

- The development of uniform and consistent policies and procedures related to Safety and Health activities and compliance with MSHA/OSHA regulations throughout ASARCO facilities.
- Training site Safety and Health personnel in Safety and Health procedures, conducting inspections, investigations, citation negotiations, reporting, record keeping and preparing for litigation.
- Coordinate/monitor Corporate Safety and Health Management Systems and Compliance Audits.
- Provide assistance in investigating incidents that may result in serious injury or death.

1982 - 1994

Senior Environmental Scientist, ASARCO Incorporated, Technical Services Center, Salt Lake City, Utah.

- Coordinate industrial hygiene activities for all ASARCO facilities. This is accomplished through Safety and Health audits and acting as an information resource for the plants.
- Provide technical advice to legal counsel in matters involving MSHA and OSHA litigation.
- Develop new and update existing labels and Material Safety Data Sheets for ASARCO products and chemical intermediates.

Special Projects

- Served on several Task Groups appointed by the National Mining Association to develop comments on proposed MSHA Standards relating to heat stress, permissible exposure limits, respiratory protection, air monitoring, hazard communication, and radon daughters. Also a member of the National Mining Association Advisory Committee to advise NIOSH on recommended methods for evaluating potential chemical exposures in the mining industry under the National Occupational Exposure Survey of Mining (NOESM).
- Coordinated the development of Asarco's comments relating to OSHA's proposed Cadmium Standard.

- Developed ASARCO's comments on OSHA's proposed standards relating to Confined Spaces, Engineering Controls vs. Respirators, and Respiratory Protection.
- Was primary Company representative for negotiations with NIOSH relating to NIOSH's proposed High Risk Disease Notification of a cohort of current and former cadmium production facility employees.
- Conducted several surveys of lead exposure of stevedoring employees during unloading of lead concentrates from ship to rail car.
- Was Company representative during a comprehensive NIOSH Health Hazard Evaluation of a large underground metal mine. This survey included evaluation of exposure to crystalline silica, diesel particulate, polyaromatic hydrocarbons, and diesel exhaust gases.

1976 - 1982

Environmental Scientist and Industrial Hygiene Coordinator, ASARCO Incorporated, Department of Environmental Sciences, Salt Lake City, Utah.

- Conducted periodic environmental surveys in approximately 35 nonferrous smelters, refineries, mines, quarries and cement asbestos pipe plants to determine compliance with various OSHA, MSHA and EPA regulations. Primary emphasis of these surveys was for occupational exposures. Compliance was determined by in-plant air sampling, review of ventilation system design and field evaluation, measurement of noise, heat stress and evaluation of personal protective equipment programs. Also acted as information resource for the plants primarily to determine compliance with MSHA and OSHA regulations.

Special Projects

- Performed industry-wide survey of commercial positive pressure filtered air units for use in overhead crane cabs, mobile equipment, and standby pulpits. Also conducted field evaluation of several installed units and prepared comprehensive report of findings and recommendations for use of such systems at ASARCO's facilities.
- Jointly participated with OSHA in evaluation of various methods available for determination of sulfur dioxide exposure.
- Developed OSHA variance requests on blood lead medical removal criteria and respirator maximum use limits.
- Performed acoustic noise control engineering surveys at a number of facilities.
- Conducted training of plant safety personnel in industrial hygiene monitoring techniques and quantitative fit testing of respirators.

1969 - 1976

Senior Industrial Hygienist and Industrial Hygienist III, State of Washington, Department of Labor and Industries, Division of Industrial Safety and Health, Olympia, Washington.

- As Senior Industrial Hygienist from 1973-1976, was in charge of all industrial hygiene compliance operations for the State of Washington. Was responsible for supervising all activities of nine Industrial Hygienists III. Such supervision included direct monitoring of the field hygienists' activities, review of all reports prior to submission to management, setting industrial hygienist survey priorities, participation in establishing field sampling equipment needs and budgetary requirements, and responding to Federal OSHA review of State industrial hygiene activities.
- As Industrial Hygienist III, conducted surveys of all types of industry in the State of Washington.

Special Projects

- Participated in development and presentation of training programs for Industrial Hygienist III. Participated in development and instruction of a five-day training course to teach State Safety Inspectors how to recognize and perform direct reading evaluation of occupational health hazards.
- Oversaw the revision of Washington State Occupational Health standards by bringing them up-to-date and making them at least as effective as the Federal Standards. Participated in the labor and management committee meetings and public hearings on these standards.
- Participated in state-wide survey of foundries to evaluate employee exposure to dust, fume, and noise.
- Participated in state-wide survey of aluminum reduction plants to evaluate employee exposure to fluorides, coal tar pitch volatiles and total particulates.
- Participated in state-wide survey of the glass reinforced plastics industry to evaluate employee exposure to solvent vapors, glass and resin dust.

1962 - 1969

Industrial Hygiene Supervisor and Industrial Hygiene Engineer, Kennecott Copper Corporation, Utah Copper Division, Salt Lake City, Utah.

- As Industrial Hygiene Supervisor, was responsible for the industrial hygiene program for a nonferrous mining/smeltering and refining complex with 6,200 employees. Duties included in-plant air sampling, design and testing of ventilation systems, noise surveys, testing of respiratory protective equipment, heat stress studies, and ionizing radiation surveys of sealed

source density meters. As Supervisor, directed the field work to be carried out by two Industrial Hygiene Engineers.

Special Projects

- Conducted air monitoring for silica dust, metal dusts and fumes, and sulfur dioxide gas.
- Designed local exhaust ventilation systems and conducted periodic field testing of such systems.
- Conducted isokinetic sampling for particulate emissions and conducted sulfur dioxide and sulfur trioxide emission testing.
- Evaluated respiratory protective devices and prepared bulletins for use at plant level regarding use and care of respirators.

EDUCATION:

B.S. Mining Engineering, 1958-1961
University of Nevada, Reno, Nevada

Associate Arts, 1956-1958
Yuba Junior College, Marysville, California

SPECIALTY BOARD CERTIFICATION:

American Board of Industrial Hygiene, 1974

AFFILIATIONS:

American Industrial Hygiene Association
American Academy of Industrial Hygiene
American Conference of Governmental Industrial Hygienists