ENVIRONMENTAL ANALYST SUPERVISOR 1

KIND OF WORK

Professional supervisory environmental analysis work.

NATURE AND PURPOSE

Under administrative direction, plans, organizes, and supervises analytical and research activities and staff in a small or medium-sized Health Department Analytical Laboratory unit involving specialized environmental analyses; analyzes environmental samples using techniques and instrumentation appropriate to the particular unit directed so that hazardous situations are detected, monitored and corrected and state and federal regulations are followed, and in order to ensure and protect the quality of the environment; performs related work as required.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Analyzes environmental samples for parameters which produce generally predictable results from sample to sample, but where the lack of precise methodology exists in order to meet the requests of clientele using established methodology and knowledge and judgment gained from scientific experience.

Analyzes environmental samples which have unpredictable behavior or where interferences must be recognized and neutralized to meet requests of clientele using established methodology.

Implements changes in existing techniques and procedures to ensure or improve upon the quality and reliability of data generated and reported using recommendations from other staff and observations based on own laboratory experience.

Studies new developments in appropriate areas of environmental analyses to be aware of new procedures and instruments in order to improve accuracy and efficiency of current procedures and instrumentation by using analytical literature and other sources.

Hires, trains, disciplines and evaluates unit personnel to ensure the availability of well trained staff by using good supervisory practices and complying with labor relations agreements, administrative procedures and department policy.

Directs, monitors and instructs unit staff in maintenance and operation of instrumentation to ensure satisfactory sample flow, accuracy and reliability of data and to eliminate instrument misuse using specialized knowledge gained from study and experience.

Plans and directs laboratory investigations of human exposure to environmental contaminants as a part of epidemiology survey, health risk assessment, or hazardous material spill so that the health impact of these exposures is evaluated by using analytical techniques and procedures that will produce the desired information in a shortened timeframe and by participating in discussion with other members of investigation team.

Directs preparation and quality assurance testing of reagents, collection containers, and preservatives to ensure their suitability and availability for field sampling using specialized knowledge and experience and established protocol.

Plans and directs research projects relating to human health and improvements in analytical techniques so that data can be used to design public health and environmental study controls using technical knowledge and supervisory skill.

Monitors and trains staff in learning essential techniques and developing specialized analytical skills so that high quality of work is produced using technical knowledge and employee development skill.

Plans and directs an adequate quality assurance system within the unit so that the quality of data is maintained by using technical expertise regarding laboratory analyses in specialty area gained from experience.

Assesses and recommends personnel and equipment needs to meet test deadlines by developing and maintaining a system of management records.

Testifies on procedures, results, and instrumentation used in analyses of samples and provides expert testimony in area of specialization as required during pre-litigation meetings or in actual court proceedings using laboratory records, experience and knowledge.

Prepares budget recommendations and controls expenditures in order to maintain the operation of the unit as directed by Analytical Laboratory management.

Schedules, assigns, and evaluates work of personnel so that analyses will be conducted in a timely and accurate manner by taking into consideration the nature of samples and requirements of clientele monitoring for completeness and checking documentation and accurate data transcription.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

The analytical techniques, scientific theory and instrumentation used in the measurement of environmental contaminants as applied to area of specialization.

Electronic data processing as applied to laboratory data reduction and output.

Contaminants in the environment and their effect on the public's health and pollution of the environment as applied to area of specialization.

Sound supervisory practices, labor relations agreements, and personnel policy and procedures as applied to supervision of staff.

Department programs, policies, state and federal regulations, as applied to technical and administrative direction of work unit.

The literature in the area of specialization, and approved analytical methods related to environmental exposure and analyses as applied to directing a unit in the Analytical Laboratory.

The budgeting process as applied to financial management of the unit.

Ability to:

Direct research and laboratory work of unit personnel in the development of analytical techniques in the area of specialization.

Operate sophisticated laboratory instrumentation.

Direct statewide programs that measure exposure levels in the area of specialization.

Direct unit to complete analyses within deadlines.

Communicate effectively at a highly technical level both verbally and in writing.

Communicate highly technical information in layman's terms both verbally and in writing.

Review and edit reports of subordinate staff.