#### CALIFORNIA STATE PERSONNEL BOARD

#### **SPECIFICATION**

INDUSTRIAL HYGIENIST
Series Specification
(Established \_\_\_\_\_)

### SCOPE

This series specification describes four levels of professional classes which specialize in industrial hygiene activities in the State, such as investigating and recommending corrections for occupational health and safety problems through anticipation, recognition, evaluation, and control of environmental hazards or stresses which adversely affect the health and well-being of workers.

Schem Code	Class Code	Class
		Industrial Hygienist
		Senior Industrial Hygienist (Specialist)
		Senior Industrial Hygienist (Supervisory) Supervising Industrial Hygienist

### **DEFINITION OF SERIES**

Classes in this series perform a broad range of occupational health and safety, and ergonomic work; provide expertise and strong specialization in one or more phases of biological, chemical, biomedical, environmental, ergonomic, or toxicological sciences; apply scientific methods and principles in the anticipation, recognition, evaluation, and control of occupational health and safety hazards; anticipate, recognize and evaluate workplace health and safety hazards and make recommendations for prevention of work related injuries and illness; conduct field surveys to investigate injuries, illnesses, and stressors; develop methods for obtaining ergonomic data, and means for physical, chemicals, and biological sample collections and analyses; collect field samples and perform or supervise chemical analyses; assess compliance with occupational health and safety standards and regulations; develop methods and document employee exposure through collection of data for physical, chemical and biological sample collection and analysis; design monitor and modify apparatus and procedures; interpret results of laboratory analyses and other findings; perform literature search and research; design or validate equipment used for the remediation or control of health or ergonomic hazards; prepare data for court cases and act as a technical witness; prepare reports; assess compliance and implement enforcement of various occupational health regulations; regulate public and commercial establishments, and issue permits; analyze and prepare data for the development and promulgation of regulations; provide consultation and analytical determinations to Federal, State, and local officials; provide education and training of workers and the public in the prevention of occupational disease and community nuisance, and in methods and techniques in meeting and enforcing standards; meet and confer with management, individuals, and groups to obtain compliance with laws and regulations concerning occupational health requirements; and perform other related work.

#### FACTORS AFFECTING POSITION ALLOCATION

Level, variety, and complexity of assigned work; independence of action; degree of public and interagency contact; amount of supervision exercised or received; degree to which decisions are sought and accepted by top management; reporting relationships; consequence of error; and extent of impact.

#### **DEFINITION OF LEVELS**

## **INDUSTRIAL HYGIENIST**

Range A. This is the entry and first working level of the class. Under close supervision of other professional staff, performs the less complex industrial hygiene work; prepares draft reports of findings and makes recommendations for the control of hazardous conditions for review by other industrial hygiene personnel; assists in the construction and use of field apparatus for monitoring or collecting samples; prepares correspondence; and does other related work.

Range B. This is the intermediate working level of this class. Under general supervision, performs industrial hygiene work of average difficulty; makes preliminary surveys and inspections of occupational environments; conducts studies of potential health hazards of specific substances or in specific industries or processes; prepares reports of findings and makes recommendations for the elimination or control of hazardous conditions; assists in the design, construction, and use of field apparatus; assists in collecting statistics and information from industrial establishments; provides information on the control of industrial health hazards; interprets standards; dictates correspondence and prepares reports; and does other related work.

Range C. This is the full journey level. Under directions, performs industrial hygiene work in places of employment; conducts research on occupational health hazards; develops special sampling and measuring apparatus and techniques; investigates complaints of unhealthful working conditions and recommends corrective action; represents the department at meetings of professional and community groups; works with and advises industry and employee groups, local health departments, and State and other governmental agencies in the field of industrial hygiene; collects and interprets statistical data; researches, prepares and edits articles for publication; prepares reports and correspondence; and does other related work.

## SENIOR INDUSTRIAL HYGIENIST (SPECIALIST)

This is the advanced journey level of the series. Incumbent independently performs more difficult and in-depth industrial hygiene work Definition and clarity required or original nature; researches emerging health hazards and areas for future industrial hygiene work; works in a staff capacity on complex industrial hygiene problems, or assists journey level or lower in conducting surveys in subject matter expert areas; develops sampling methodologies and procedures; collects and analyzes statistical data for policy decisions and publications; coordinates major studies and investigations; researches and prepares articles for publication; represents the employer before community groups, and other private sector and governmental entities; prepares reports and correspondence; is a subject matter expert on a project or project development level. Incumbents may be assigned lead responsibility for a specific project, program function, or area of expertise. Work at this level requires expertise that is significantly greater than standard full journey level assignments.

## SENIOR INDUSTRIAL HYGIENIST (SUPERVISORY)

This is the first supervisory level. Under general direction, is responsible for some or all aspects of an industrial hygiene or ergonomics program; plans, assigns, and supervises the work of industrial hygiene or ergonomic staff members; determines priorities, assigns work, and evaluates performance of staff; prepares and reviews correspondence and reports; identifies training needs and assists in the development of training plans; reviews proposed health standards, evaluates them, and makes recommendations for their acceptance or modifications; represents the department with communities, industries, and other agencies; consults with management, professional, and technical personnel, and makes recommendations for the prevention, elimination, or control of occupational health or ergonomic hazards; and may perform evaluations and the more complex industrial hygiene work.

#### SUPERVISING INDUSTRIAL HYGIENIST

This is the second supervisory level. Under general direction, is responsible for work of the highest level of technical and professional expertise; plans, organizes, and directs the industrial hygiene work in a major geographical area or supervises the work of a major section activity; proposes and evaluates health standards; conducts and participates in meeting with department staff and others concerning occupational health and safety matters; determines priorities, assigns work, and evaluates staff performance; prepares and reviews correspondence and reports; maintains liaison and represents the department with other governmental agencies, labor, management, and the public, and as assigned, represents the occupational health and safety program on departmental, agency, or interagency committees or task forces; and does other related work.

# MINIMUM QUALIFICATIONS

#### ALL LEVELS:

Education: Graduation from college with major work in industrial hygiene, environmental health, biomedical, chemistry, biology, physics, toxicology, public health, science related engineering, or in a closely related field. (Registration as a senior in a recognized institution will admit applicants to the examination, but they must produce evidence of graduation or its equivalent before they can be considered eligible for appointment.) Do we have capability to continue with this structure?

## INDUSTIRAL HYGIENIST (SPECIALIST)

Education is as indicated above. (Registration as a senior in a recognized institution will admit applicants to the examination, but they must produce evidence of graduation or its equivalent before they can be considered eligible for appointment.)

### SENIOR INDUSTRIAL HYGIENIST (SPECIALIST)

Applicants who do not possess a Certified Industrial Hygienist certification from the American Board of Industrial Hygiene will be admitted to the examination if able to demonstrate acceptance of certification candidacy. Proof of valid certification shall be presented prior to appointment.

And

#### Either I

Experience: One year of experience in the California state service performing the duties of an Industrial Hygienist, Range C.

Or II

Five years of increasingly responsible professional or technical experience in anticipating, recognizing, evaluating, and controlling health hazards in work places, and developing, evaluating, and implementing occupational health standards. This experience shall include at least two years in the industrial hygiene position comparable in level, responsibility, and duties to that of either an Industrial Hygienist in the California State Service. (A master's degree in chemistry, biology, physics, environmental health, industrial hygiene, public health, or a closely related curriculum may be substituted for one year of the required general experience.)

# SENIOR INDUSTRIAL HYGIENIST (SUPERVISORY)

Certification: Possession of a Certificate in the Comprehensive Practice of Industrial Hygiene issued by the American Board of Industrial Hygiene. (Applicants who do not have the applicable certificate will be admitted to the examination if they can demonstrate that they have been accepted by the appropriate board for candidacy for the certification, but they must secure the certificate before they will be considered eligible for appointment.)

And

## Either I

Experience: One year of experience in California state service performing the duties of an Industrial Hygienist, Range C, or Senior Industrial Hygienist (Specialist).

Or II

Experience: Five years of increasingly responsible, professional, or technical experience in identifying, evaluating, and controlling health hazards in work places, and developing, evaluating, and implementing occupational health standards. This experience shall include at least two years in an industrial hygiene or ergonomics position comparable in level, responsibility, and duties to that of an Industrial Hygienist Range C, in the California State Service. (A Master's Degree in chemistry, biology, physics, environmental health, industrial hygiene, public health, or a closely related curriculum may be substituted for one year of the required general experience.)

# SUPERVISING INDUSTRIAL HYGIENIST

Certification as stated above for Senior Industrial Hygienist (Supervisory).

And

### Either I

Experience: Two years of experience in the California state service performing the duties of a Senior Industrial Hygienist.

Or II

Experience: Five years of broad and extensive professional or technical experience in identifying, evaluating, and controlling health hazards in work places, and developing, evaluating, and implementing occupational health standards. This experience shall include at least two years in an industrial hygiene or ergonomics position comparable in level, responsibility, and duties to that of a Senior Industrial

Hygienist in the California State Service. (A Master's Degree in chemistry, biology, physics, environmental health, industrial hygiene, public health, or a closely related curriculum may be substituted for one year of the required general experience.)

## **KNOWLEDGE AND ABILITIES**

## **INDUSTRIAL HYGIENIST**

Knowledge of: Principles and practices of industrial hygiene, public or environmental health, or ergonomics; one or more areas of expertise in biological, chemical, or toxicological sciences; methods, techniques, and practices used in determining and eliminating health hazards in industry; State and Federal laws, rules, and regulations on the health of industrial workers; concepts of apparatus used to monitor and/or collect samples of substances or data for analysis.

Ability to: Analyze situations accurately, derive recommendations for the elimination or control of hazardous conditions or risk factors, and take effective action; interpret and apply industrial hygiene, ergonomic, and human factor standards; establish and maintain cooperative relations with those contacted in the course of the work; represent the employer in meetings with other governmental jurisdictions, industry, and community groups; communicate effectively; and prepare reports.

## SENIOR INDUSTRIAL HYGIENIST (SPECIALIST)

Knowledge of: All of the above and special knowledge of particular branch of industrial hygiene, industry classification, or process.

Abilities to: All of the above and independently research and perform the most difficult and complex surveys; plan, conduct, and direct research studies; develop new and modify existing protocol; prepare reports and papers for internal distribution and official publication; conduct specialized research on advanced topics pertaining to the field of occupational health; provide information to assist with investigation and prosecution of violations of local State and Federal laws and regulations; act as an expert witness; maintain liaison with Federal, State, private sector entities and local agencies, and with labor, management, and public interest groups.

## SENIOR INDUSTRIAL HYGIENIST (SUPERVISORY)

Knowledge of: All of the above, and principles and practices of effective supervision and management of technical staff; a supervisor's responsibility for promoting equal opportunity in hiring and employee development and promotion, and for maintaining a work environment that is free of discrimination and harassment; and maintain budgets and contract management.

Ability to: All of the above, and plan, organize, and direct the work of a professional staff; effectively promote equal opportunity in employment and maintain a work environment that is free of discrimination and harassment; evaluate proposed health standards and make recommendation for the modification or acceptance; establish and maintain liaison with Federal, State and local agencies, and with labor, management, and public interest groups; outstanding decision making ability to resolve conflicts, communication skills, vision, strategic thinking and transparent....

## SUPERVISING INDUSTRIAL HYGIENIST

Knowledge of: All of the above, and principles and practices of personnel management and training; a manager's responsibility for promoting equal opportunity in hiring and employee development and promotion, and for maintaining a work environment that is free of discrimination and harassment.

Ability to: All of the above, and assign, direct, and evaluate comprehensive industrial hygiene and ergonomic studies and investigations; propose and evaluate health standards; effectively represent the occupational health and safety program on departmental, agency or interagency committee work; effectively promote equal opportunity in employment.

### **Industrial Hygienist Alternate Range Criteria XXX**

## Range A

This range shall apply to incumbents who do not meet the Range B or Range C criteria.

# Range B

One year of satisfactory experience in the California state service performing duties comparable to an Industrial Hygienist, Range A; or two years of professional scientific experience in industrial hygiene, analysis research, management, planning, regulation, or investigation. Comparable volunteer and internship positions prior to appointment into the Industrial Hygienist series shall bear equal weight as a career paid position, performed during or after completion of the required education. Possession of a master's degree in industrial hygiene, environmental health, engineering, chemistry, biology, physics, medicine, public health or in a scientific discipline directly related to occupational health and safety will substitute for the required experience.

# Range C

Two years of satisfactory experience in the California state service performing duties comparable to an Industrial XXX, Range B; or three years of professional scientific experience in industrial hygiene, analysis, research, management, planning, regulation, or investigation. Comparable volunteer and internship positions prior to appointment into the Industrial Hygienist series shall bear equal weight as a career paid position, performed during or after completion of the required education. Possession of a master's degree in industrial hygiene, environmental health, engineering, chemistry, biology, physics, public health or in a scientific discipline directly related to occupational health and safety will substitute for one year of the required experience; or possession of a doctorate in industrial hygiene, environmental health, engineering, chemistry, biology, physics, medicine, public health or in a scientific discipline directly related to occupational health and safety may be substituted for the required experience.

When the requirements for the particular criteria are met and upon recommendation of the appointing power, the employee shall receive a rating under the provisions of CalHR California Code of Regulations, Title 2, Section 599.676.