

California State Personnel Board Specification

Environmental Scientist

Series Specification

(Established July 22, 1981)

Scope

This series specification describes three Environmental Scientist and three Environmental Program Manager classifications used to perform a broad range of staff, supervisor, and management work concerning present and future environmental, environmental health, and natural resource management issues related to protecting ~~the State's~~ California's natural resources, agricultural productivity, and public health. Incumbents give presentations; prepare environmental permitting packages, regulatory permits, and other environmental documents; implement enforcement of various environmental and environmental health-related laws and regulations; and conduct natural resource management and environmental protection, planning, and implementation activities. Incumbents apply scientific methods and principles in the identification, research, and solution of problems in the areas of biodiversity planning, environmental monitoring, water resources development, water conservation, water recycling, waste classification, and illegal discharge of waste (including solid and hazardous waste) to the lands and waters of ~~the state~~ California, toxic and hazardous materials management, point and nonpoint source pollution, natural area management, habitat protection and restoration, wetland restoration, river greenways, riparian habitat, land and water use, agricultural return flows, agricultural productivity, timber harvesting, streambed alterations, and watershed evaluation. Incumbents analyze and evaluate available data on the effects of air and water pollutants, waste management, prevention and recycling, water diversions, and water use on human health, vegetation, fish, wildlife, water supplies, potential land uses, and other aspects of the environment; prepare and review environmental impact reports and other documents to determine the effects of proposed activities on environmental health and all areas of the environment; coordinate environmental programs related to air, water and agricultural development, water pollution, waste management and control, and other environmental and environmental health programs with other public and private agencies; develop regulatory measures and implement enforcement of environmental standards; manage and oversee site cleanup and emergency response efforts; develop recommendations regarding environmental programs as these may be affected by scientific findings; prepare and edit scientific papers for publication; research and develop innovative programs to address emerging problems; develop scientific methodologies; develop and assess alternatives for mitigation of the hazards to the public and environment; conduct or participate in remedial investigations, feasibility studies, and remedial action plans; review facility environmental practices; consult with and advise other agencies and institutions engaged in related environmental analysis, management, planning, regulation, investigation, and research; meet and confer with individuals and groups to obtain compliance with laws and regulations concerning environmental requirements of ~~the state~~ California and Federal governments; provide training; evaluate and certify local enforcement agencies; develop and/or analyze legislation, regulations, plans, policies, procedures, alternative technologies, practices, criteria, and guidelines; inspect permitted facilities, regulated activities, and contaminated or environmentally sensitive sites; participate in hearings and field investigations as a

staff expert for environmental matters; and prepare reports and correspondence. On occasion, incumbents may perform environmental analysis in a laboratory setting.

Schem Code	Class Code	Class
BH70	0762	Environmental Scientist
BH74	0765	Staff Senior Environmental Scientist (<u>Specialist</u>)
BH73	0764	Senior Environmental Scientist (<u>Supervisory</u>)
BH82	0756	Environmental Program Manager I (Supervisory)
BH80	0760	Environmental Program Manager I (Managerial)
BH76	0769	Environmental Program Manager II

Entry Level

Entry to into the series is typically at one of the alternate ranges of the level of Environmental Scientist level depending on education, experience, and qualifications of the individual.

Factors Affecting Position Allocation

Position allocation and placement of employees in alternate ranges are affected by: 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

Environmental Scientist

This class is the entry, intermediate working, and ~~full~~ journey level of the series. Range A is the entry and first working level of the class. Under close supervision, incumbents perform a variety of the less difficult and responsible professional scientific office and field work. In accordance with detailed instructions and specific standards, incumbents gather data on public health, environmental, agricultural productivity, and natural resource management issues; perform preliminary environmental analysis, research, surveys, investigations, and studies of less difficulty; prepare preliminary drafts of reports; prepare drafts of routine correspondence; answer questions of a routine and minor nature from the public; prepare regulatory and compliance documents; and do other related work. Work at this level is characterized by a reliance on detailed instructions and assistance from lead persons and supervisors in the application of proven techniques and methodologies to assigned work.

Range B is the intermediate working level of the class. Under general supervision, incumbents perform a variety of responsible scientific professional office and field work. Incumbents gather data on public health, environmental, agricultural productivity, and natural resource management issues; perform

environmental analysis, research, surveys, investigations, and studies of average difficulty; write preliminary reports; prepare routine correspondence and answer questions of a routine nature from the public and other governmental entities and agencies; prepare regulatory and compliance documents; enforce environmental laws and regulations; and do other related work. Work at this level is characterized by a reliance on proven techniques and methodologies.

Range C is the ~~full~~ journey level. Under direction, incumbents perform a variety of responsible professional scientific office and field work. Incumbents independently perform ~~complex~~ assigned public health, environmental, agricultural productivity, and natural resource management analysis, research, surveys, investigations, and studies; write final reports; prepare regulatory and compliance documents; enforce environmental laws and regulations; prepare non-routine correspondence and answer ~~difficult~~ non-routine questions from the public; and do other related work. Incumbents allocated to this level perform a variety of tasks including the more responsible, varied, and complex assignments; incumbents may provide consultative advice to various governmental entities and agencies. Work at this level is often characterized by independent development and use of techniques and methodologies. Incumbents may be assigned lead responsibility for a specific project.

Staff Senior Environmental Scientist (Specialist)

The Staff Senior Environmental Scientist (Specialist) is the advanced journey level of the series. Incumbents independently identify problems, develop courses of action, and conduct ~~extremely complex and difficult~~ critical and/or sensitive scientific investigations and studies and may prepare guidance, policy, planning, or regulatory documents and legislative proposals on issues of ~~major~~ importance to the employer, and do other related work. Decision making at this level has a higher consequence of error than that that of and Environmental Scientist, Range C. Incumbents may be assigned lead responsibility for a specific project, program function, or area of expertise; may act as a mentor to lower level staff; and may act as consultants to other technical staff, management, and other agencies in those matters.

Senior Environmental Scientist (Supervisory)

This is the first supervisory level of the series. Incumbents supervise and direct the work of professional or technical staff, are responsible for staff development, performance evaluation, program budgeting, and work force planning, and do other related work. Incumbents performing in this capacity have the authority and responsibility in the interest of management to recruit, hire, transfer, suspend, lay off, recall, promote, discharge, assign, reward, or discipline employees. Incumbents have the responsibility to direct employees, adjust employee grievances, or effectively recommend such actions.

Environmental Program Manager I (Supervisory)

This is the second supervisory level of the series. Incumbents direct and have charge of critical and/or sensitive public health, environmental, agricultural productivity, and natural resource management programs or components ~~which are of major sensitivity and complexity~~; carry authority and accountability for timely completion of program objectives and for submittal of satisfactory products;

are responsible for operational planning and assigning of projects, budgeting for time and funds, reviewing and evaluating achievements, and preparing administrative reports; coordinate program activities with technical and administrative support sections and their activities; assist in formulating and administering policies; exercise discretion in the provision of oversight and coordination of projects or programs; maintain liaison with other governmental agencies and the private sector; evaluate program performance and achievements; plan for work force needs; represent their organization in compliance negotiations, policy implementation, program budgeting, and strategic planning; and do other related work. Incumbents may supervise a group of ~~Staff~~ Senior Environmental Scientists and other professionals-professional and technical staff working on a major-critical and/or sensitive public health, environmental, and natural resource management, regulation, compliance, or research project. Incumbents have authority in the interest of management to recruit, hire, transfer, suspend, lay off, recall, promote, discharge, assign, reward, or discipline employees. Incumbents have the responsibility to direct employees, adjust employee grievances, or effectively recommend such actions. Incumbents may also function as a nonsupervisory staff specialist in a critical and/or sensitive program or project management or coordination, policy development, or executive advisor position.

Environmental Program Manager I (Managerial)

This is the first managerial level of the series which has significant responsibility for formulating and administering policies or programs. Incumbents direct and have charge of critical and/or sensitive public health, environmental, agricultural productivity, and natural resource management programs or components which are of ~~major sensitivity and complexity~~ significant importance to the employer; carry authority and accountability for timely completion of program objectives and for submittal of satisfactory products; are responsible for operational planning and assigning of projects, budgeting for time and funds, staff development and work force planning, reviewing and evaluating program performance and achievements, and preparing administrative reports; coordinate program activities with technical and administrative support sections and their activities; formulate and administer policies; maintain liaison with other governmental agencies and the private sector; independently represent their organization in compliance negotiations, policy implementation, performance evaluation, program budgeting, and strategic planning; and do other related work. Incumbents have authority in the interest of management to recruit, hire, transfer, suspend, lay off, recall, promote, discharge, assign, reward, or discipline employees. Incumbents have the responsibility to direct employees, adjust employee grievances, or effectively recommend such actions.

Environmental Program Manager II

This is the second managerial level of the series and, organizationally, incumbents are in the top management structure. Incumbents plan, organize, and direct critical, sensitive and/or complex public health, environmental, agricultural productivity, and natural resource management programs of major importance to the employer, and do other related work. Incumbents have significant responsibility for formulating and administering policies, ~~and programs,~~ and strategic plans, and exercise discretion in the provision of oversight and coordination on a broad and technically diverse range of projects or programs. Incumbents typically supervise one or more Environmental Program Managers I or other second-level supervisors.

Minimum Qualifications

All Levels:

Education: Possession of a bachelor's or advanced degree with a major in a biological, chemical, physical, or environmental science, soil science, water science, hydrology, agronomy, natural resource science, environmental or public health, physical geography, or a closely related scientific discipline. (Admission to a masters or doctoral degree program in a biological, chemical, physical, or environmental science, or a closely related scientific discipline shall be considered to meet these education qualifications.)

Environmental Scientist

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

Staff Senior Environmental Scientist (Specialist)

Senior Environmental Scientist (Supervisory)

EITHER I

Experience: Two years of experience in the California state civil service performing the duties of an Environmental Scientist, Range C.

OR II

Experience: Five years of increasingly responsible professional experience as a scientist in environmental analysis, research, management, planning, regulation, or investigation, two years of which have included responsibility in the development or implementation of environmental policies, programs, plans, or research projects; or conducting an environmental monitoring and surveillance, enforcement, or environmental management program; or in the direction of the work of a ~~multidisciplined~~ multidisciplinary environmental investigatory or regulatory staff, at a level equivalent to that of an Environmental Scientist, Range C, in the California state service. Possession of a master's degree in a biological, chemical, physical, or environmental science, soil science, water science, hydrology, agronomy, natural resource science, environmental or public health, physical geography, or a closely related scientific discipline may be substituted for one year of the required general experience; possession of a doctorate in the above-named disciplines may be substituted for two years of the general experience.

Environmental Program Manager I (Supervisory)
Environmental Program Manager I (Managerial)

EITHER I

Experience: Two years of experience in the California state service performing the duties of a ~~Staff or~~ Senior Environmental Scientist.

OR II

Experience: Five years of broad, extensive, and increasingly responsible experience as a scientist in environmental analysis, management, research, planning, regulation, ~~or investigation,~~ or enforcement, at least two years of which must have been in an administrative or supervisory position in full charge of a staff responsible for the development or implementation of environmental policies, programs, plans, or research projects; or conducting a ~~major-critical and/or sensitive~~ environmental monitoring and surveillance or environmental management program; or in the direction of the work of a large ~~multidisciplined-multidisciplinary~~ environmental investigatory or regulatory staff at a level equivalent to a ~~Staff or~~ Senior Environmental Scientist in the California state civil service. Possession of a master's degree in a biological, chemical, physical, or environmental science, soil science, water science, hydrology, agronomy, natural resource science, environmental or public health, physical geography, or a closely related scientific discipline may be substituted for one year of the required general experience; possession of a doctorate in the above-named disciplines may be substituted for two years of the general experience.

Environmental Program Manager II

EITHER I

Experience: Two years of experience in the California state civil service performing the duties of an Environmental Program Manager I (Supervisory) or Environmental Program Manager I (Managerial).

OR II

Experience: Five years of broad, extensive, and increasingly responsible experience as a scientist in environmental analysis, management, research, planning, regulation, ~~or investigation,~~ or enforcement, at least two years of which must have been in an administrative or supervisory position in full charge of a staff responsible for the development or implementation of environmental policies, programs, plans, or research projects; or conducting or managing a ~~major-critical and/or sensitive~~ environmental monitoring and surveillance or environmental management program; or in management of the work of a large ~~multidisciplined-multidisciplinary~~ environmental investigatory or regulatory staff at a level equivalent to an Environmental Program Manager I (Supervisory) or Environmental Program Manager I (Managerial) in the California state civil service. Possession of a master's degree in a biological, chemical, physical, or environmental science, soil science, water science, hydrology, agronomy, natural resource science, environmental or public health, physical geography, or a closely related scientific

discipline may be substituted for one year of the required general experience; possession of a doctorate in the above-named disciplines may be substituted for two years of the general experience.

Knowledge and Abilities

Environmental Scientist

Knowledge of: Basic principles of land, water, fish, wildlife, and other natural resources research; principles of ecology, soil and irrigation sciences, resource management, hydrology, geology, and waste prevention; statistical methods; land-use practices with reference to their general effect on human health, natural resources, agricultural productivity, and the environment; effects of hazardous and non-hazardous waste material and their interactions on the environment; chemical reaction reactions; State-California and Federal environmental laws, rules, regulations, and requirements; basic toxicology, hydrology, geology and principles of risk assessment and risk management; concepts employed in a variety of disciplines including environmental planning, economics, and resource management; geolocation and geo-referencing software applications, resource conservation program impacts and implementation strategies; and recycling issues.

Ability to: Apply or modify scientific methods and principles; collect environmental data; analyze and evaluate data and reach sound conclusions; review, check, and interpret scientific and environmental reports; analyze situations and take appropriate actions; establish and maintain cooperative relations and effective communications with local governments and all persons contacted; communicate effectively; prepare clear, complete, and technically accurate reports; apply laws, rules, regulations, policies, and requirements of State-California and Federal environmental protection and resource management programs; assess the impact of proposed State and Federal environmental legislation and regulations; understand principles of risk assessment and risk management; work with professionals from a variety of disciplines within and outside of State government; and review and understand technical research reports on emerging public health and environmental issues.

Staff-Senior Environmental Scientist (Specialist)

Knowledge of: In addition to the above, broad knowledge of the legislative process; and the California and Federal environmental regulatory and resource management laws, regulations, plans, programs, and policies of the State relating to their program area; resource management practices and techniques; and chemical substances and waste materials and their interactions with and effects on public health and the environment.

Ability to: In addition to the above, develop scientific methodologies, research projects, criteria, procedures, guidelines, reference materials, planning and regulatory documents, and other innovative solutions for difficult-critical and/or sensitive environmental management problems; independently plan environmental studies; provide research and evaluation of short-term and important projects concerning public health, agricultural productivity, and environmental protection; develop techniques for handling and analyzing a large variety of detailed data; communicate the results and implications of studies to nonspecialists; act as an expert witness in court or at legislative or quasi-judicial hearings;

provide leadership in accomplishing basic functions and objectives in assigned programs; inspire confidence and effective working relationships with employees, managers, and leaders in government and industry.

Senior Environmental Scientist (Supervisory)

~~Environmental Program Manager I (Supervisory)~~

~~Environmental Program Manager I (Managerial)~~

~~Environmental Program Manager II~~

Knowledge of: In addition to the above, techniques for dispute resolution, principles and techniques of personnel management and supervision; budgeting and other administrative functions; and a manager's/supervisor's role in the Affirmative Action and Equal Employment Opportunity Program and the processes available to meet affirmative action and equal employment opportunity objectives.

Ability to: In addition to the above, plan, organize, and direct the work of others; perceive the alternatives available in the solution of management problems and select realistic courses of action; and effectively contribute to the employer's affirmative action and equal employment opportunity objectives.

Environmental Program Manager I (Supervisory)

Environmental Program Manager I (Managerial)

Environmental Program Manager II

Knowledge of: In addition to all of the above, health and environment related priorities of legislative and administrative branches of California and Federal government; health and environmental solutions and initiatives being pursued by other states, local agencies, and the Federal government; and performance management strategies.

Ability to: In addition to all of the above, manage, lead, or administer program resources; make decisions regarding program milestones; provide a forum for the resolution of conflicts or disputes among implementing agencies; ensure prompt and balanced media utilization; develop innovative solutions to difficult human health and environmental management problems; and evaluate program performance and achievements.

Additional Desirable Qualifications

All Levels:

In appraising the relative qualifications of candidates, consideration will be given to the extent and type of pertinent experience and education over and above that required under "Minimum Qualifications." Experience in management, research, planning, or consultation in environmental programs, demonstrated environmental management skills, and knowledge of broad principles of economics, social science, and political science will be given preference.

Some positions within the Department of Health Services may require possession of a valid certificate of registration as an Environmental Health Specialist in the State of California pursuant to California Health and Safety Code Sections 514-534.

Class History

Class	Date Established	Date Revised	Title Changed
Environmental Scientist	07/22/1981	09/18/2001 <u>06/20/2013</u>	09/18/2001
Staff Senior Environmental Scientist (Specialist)	07/22/1981	09/18/2001 <u>06/20/2013</u>	09/18/2001 <u>06/20/2013</u>
Senior Environmental Scientist (Supervisory)	07/22/1981	09/18/2001 <u>06/20/2013</u>	09/18/2001 <u>06/20/2013</u>
Environmental Program Manager I (Supervisory)	05/06/1970	09/18/2001 <u>06/20/2013</u>	09/18/2001
Environmental Program Manager I (Managerial)	09/18/2001	--	--
Environmental Program Manager II	07/22/1981	09/18/2001 <u>06/20/2013</u>	09/18/2001