

# Senior Hazardous Substances Engineer Code: 0PBFW

**Department:** Department of Toxic Substances Control

**Exam Type:** Departmental, Open **Final Filing Date:** Continuous

## **CLASSIFICATION DETAILS**

Senior Hazardous Substances Engineer - \$8,921.00 - \$13,219.00 per month

View the Senior Hazardous Substances Engineer classification specification

If you have tested for the Senior Hazardous Substances Engineer classification as part of the Hazardous Substances Engineer & Senior Hazardous Substances Engineer exam in the previous 12 months, it may be too early for you to take this exam. Please check your CalCareer account for the retake date on your exam results notification for this classification BEFORE continuing this exam process. Retaking this exam under another or a new User I.D. and password, Social Security Number (voluntary, not required, information), or name is not allowed.

# **APPLICATION INSTRUCTIONS**

Final Filing Date: Continuous

## Who Should Apply:

Applicants who meet the minimum qualifications as stated on this bulletin may apply for and take this examination.

Once you have taken this examination, you may not retake it for twelve (12) months.

# **Special Testing Arrangements:**

If you require assistance or alternative testing arrangements due to a disability, please contact the testing department listed in the Contact section of this bulletin.

## MINIMUM QUALIFICATIONS

All applicants must meet the education and/or experience requirements as stated on this exam bulletin to be accepted into the examination. Part-time or full-time jobs, regardless of whether paid or volunteer positions, and inside or outside California state service will count toward experience.

## All Levels:

Education: Equivalent to graduation from college with a Bachelor of Science Degree with major work in Civil, Chemical, Environmental, Mechanical, or Waste Management Engineering from a college accredited by the Engineers' Council for Professional Development for training in engineering or equivalent degree approved by the Council for Private Postsecondary and Vocational Education under the provisions of California Education Code Chapter 3, Part 59, Division 10.

(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.)

(Additional qualifying experience may be substituted for the required education on a year-for-year basis up to a maximum of two years. When substituting experience for education, qualifying education must include a minimum of 60 semester units in the engineering subjects noted above from an accredited college or equivalent units from an institution approved by the Council for Private Postsecondary and Vocational Education under the provisions of California Education Code Chapter 3, Part 59, Division 10.)

(For Senior Hazardous Substances Engineer and above, possession of an engineering Master's Degree in Civil, Chemical, Environmental, Mechanical, or Waste Management Engineering or a directly related engineering field from a recognized college or university may be substituted for one year of the general experience requirement; an engineering Doctoral Degree in Civil, Chemical, Environmental, Mechanical, or Waste Management or a directly related engineering field from a recognized college or university may be substituted for two years of the general experience requirement.)

(Possession of a valid certificate as an engineer-in-training as issued by the California State Board of Registration for Professional Engineers may be substituted for the required education.)

# **Senior Hazardous Substances Engineer**

#### Either 1

Experience: Four years of experience in the California state service performing hazardous substances management duties at a level of responsibility not less than a Hazardous Substances Engineer, Range C.

## Or 2

Experience: Two years of experience in the California state service performing the duties of a Hazardous Substances Engineer, Range D.

#### Or 3

Experience: Six years of increasingly responsible professional experience in hazardous substances management or process control engineering, which shall have been comparable in type and level to that of a Hazardous Substances Engineer, Range C, in the California state service.

## POSITION DESCRIPTION

# **Senior Hazardous Substances Engineer**

This is the staff specialist level of the series responsible for independently performing the most complex and difficult engineering workload which is demonstrably above the journey level in Headquarters and regional settings. Incumbents may report to Supervising Hazardous Substances Engineers II or higher supervisory and management levels within DTSC. Incumbents may act as project managers on the most difficult or complex projects; review technical work products of lower-level staff; act as mentor to new staff and as technical and program consultants to all levels of the Department and external entities or individuals. Incumbents may act as lead persons in line program units, or on assigned projects, studies, or task forces. Incumbents may also be assigned statewide responsibility for the development of engineering protocol, research studies, and related programs; participate in or be assigned responsibility for making policy recommendations, strategic planning, regulation, and legislation development in major program areas requiring engineering expertise above the full journey level.

## **EXAMINATION SCOPE**

This examination consists of the following components:

**Training and Experience Evaluation – Weighted 100% of the final score.** 

The examination consists solely of a **Training and Experience Evaluation**. To obtain a position on the eligible list, a minimum score of 70% must be received. Applicants will receive their score upon completion of the Training and Experience Evaluation process.

In addition to evaluating applicants' relative knowledge, skills, and ability, as demonstrated by quality and breadth of education and/or experience, emphasis in each exam component will be measuring competitively, relative job demands, each applicant's:

# Knowledge of:

- 1. Hazardous substances management and/or public health engineering principles and practices
- 2. Treatment and disposal methods of hazardous waste
- 3. Programs for resource recovery
- 4. Hazardous substances management facilities engineering design, construction, and operation processes
- 5. Hazardous substances disposal systems and resource recovery processes
- 6. Public health and hazardous substances management engineering principles, practices, and administrative procedures
- 7. State laws pertaining to public health and hazardous substances management engineering in California
- 8. Hazardous substances management facilities design and construction.
- 9. The major Department of Toxic Substances Control program areas
- 10. State and Federal regulations such as CEQA, RCRA, CERCLA, CAA, CWA, and the TSCA

- 11. Project management methods and techniques
- 12. Hazardous substances disposal systems, detoxification, and purification processes
- 13. Resource recovery processes and hazardous substances management programs.

# Ability to:

- 1. Review, check, and interpret hazardous substances management engineering plans, estimates, and specifications
- 2. Evaluate findings and make recommendations for the elimination or control of unsanitary or hazardous conditions
- 3. Establish and maintain cooperative relationships with those contacted in the course of work
- 4. Communicate effectively
- 5. Analyze situations accurately and adopt an effective course of action
- 6. Interpret laws, rules, and regulations pertaining to public health and hazardous substances management engineering in California.
- 7. Interpret and apply State and Federal regulations
- 8. Prepare project plans
- 9. Review, check, and interpret major hazardous substances management engineering plans, engineering elements of hazardous waste permit applications, facility closure and site cleanup plans, and estimates and specifications.

## **ELIGIBLE LIST INFORMATION**

A departmental, open eligible list for the **Senior Hazardous Substances Engineer** classification will be established for:

# **Department of Toxic Substances Control**

The names of **successful** competitors will be merged onto the eligible list in order of final score regardless of exam date. Eligibility expires **twelve (12) months** after it is established. Applicants must then retake the examination to reestablish eligibility.

Veterans' Preference will be granted for this examination. In accordance with Government Codes 18973.1 and 18973.5, whenever any veteran, or widow or widower of a veteran achieves a passing score on an open examination, he or she shall be ranked in the top rank of the resulting eligible list.

Veterans status is verified by the California Department of Human Resources (CalHR). Information on this program and the Veterans' Preference Application (Std. form 1093) is available online. Additional information on veteran benefits is available at the Department of Veterans Affairs.

Career Credits will not be added to the final score for this exam, because it does not meet the requirements to qualify for Career Credits.

# **EXAMINATION INFORMATION**

<u>Preview of the Senior Hazardous Substances Engineer Training and Experience Evaluation</u>

## PREPARING FOR THE EXAMINATION

Here is a list of suggested resources to have available prior to taking the exam.

**Employment History:** Employment dates, job titles, organization names and addresses, names of supervisors or persons who can verify your job responsibilities, and phone numbers of persons listed above.

**Education:** School names and addresses, degrees earned, dates attended, courses taken (verifiable on a transcript), persons or office who can verify education, and phone numbers of persons or offices listed above.

**Training:** Class titles, certifications received, names of persons who can verify your training, and phone numbers of persons listed above.

## TAKING THE EXAMINATION

**Take the Senior Hazardous Substances Engineer examination** 

# **TESTING DEPARTMENTS**

Department of Toxic Substances Control

# **CONTACT INFORMATION**

If you have any administrative questions concerning this examination bulletin, including provision of reasonable accommodation for this testing process, please contact:

Department of Toxic Substances Control (916) 323-4937

If you have any *technical* questions concerning this examination bulletin, please contact:

California Department of Human Resources

Attn: Examination Services

1515 S Street

Sacramento, CA 95811 Phone: 1-866-844-8671

California Relay Service: 1-800-735-2929 (TTY), 1-800-735-2922 (Voice)

TTY is a Telecommunications Device for the Deaf, and is reachable only from phones equipped with a TTY Device.

## **EQUAL OPPORTUNITY EMPLOYER**

The State of California is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right of family care and medical leave, gender, gender expression, gender identity, genetic information, marital status, medical condition, military or veteran status, national origin, political affiliation, race, religious creed, sex (includes pregnancy, childbirth, breastfeeding, and related medical conditions), and sexual orientation.

## DRUG-FREE STATEMENT

It is an objective of the State of California to achieve a drug-free State work place. Any applicant for State employment will be expected to behave in accordance with this objective, because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and the special trust placed in public servants.

## GENERAL INFORMATION

Examination and/or Employment Application (STD 678) forms are available at the California Department of Human Resources, local offices of the Employment Development Department, and through your **CalCareer Account**.

If you meet the requirements stated on this examination bulletin, you may take this examination, which is competitive. Possession of the entrance requirements does not assure a place on the eligible list. Your performance in the examination described in this bulletin will be rated against a predetermined job-related rating, and all applicants who pass will be ranked according to their score.

The Department of Toxic Substances Control reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all applicants will be notified.

General Qualifications: Applicants must possess essential personal qualifications including integrity, initiative, dependability, good judgement, the ability to work cooperatively with others, and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) servicewide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

High School Equivalence: Equivalence to completion of the 12<sup>th</sup> grade may be demonstrated in any one of the following ways: 1) passing the General Education Development (GED) Test; 2) completion of 12 semester units of college-level work; 3) certification form the State Department of Education, a local school board, or high school authorities that the competitor is considered to have education equivalent to graduation from high school; or 4) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.