# **Examination Bulletin**



# P.O. BOX 944246 SACRAMENTO, CA 94244-24604

# **PIPELINE SAFETY ENGINEER**

8FS0601

DEPARTMENT(S): Department of Forestry & Fire Protection

OPENING DATE: November 14, 2018

FINAL FILING DATE: December 14, 2018

EXAM TYPE: Open

SALARY: \$6,878.00 - \$11,235.00

LOCATIONS: Statewide

# **EQUAL EMPLOYMENT & DRUG FREE STATEMENTS**

The State of California is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right to 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.

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.

# **WHO CAN APPLY**

Persons who meet the minimum qualifications of the classification, as stated on this examination bulletin. All applicants must meet the education and/or experience requirements by the final filing date of **December 14, 2018.** 

#### **HOW TO APPLY**

To apply for this examination, please complete and return the following:

- <u>Examination/Employment Application (STD.678)</u>. This can also be found on the California Department of Human Resources' website. *You may submit your application by mail or in person.*
- Include a copy of your degree or unofficial transcripts from an accredited college in the applicable field of study. **Applications received without this information may be rejected.**

#### **SUBMIT BY MAIL:**

Department of Forestry and Fire Protection Examination Unit – (Attention: Ashley Stewart) P.O Box 944246 Sacramento, CA 94244-2460

#### **SUBMIT IN PERSON:**

Department of Forestry and Fire Protection Examination Unit – (Attention: Ashley Stewart) 1300 U Street Sacramento, CA 95818

#### **DO NOT SUBMIT APPLICATIONS VIA E-mail**

Applications postmarked or personally delivered after the final filing date, **December 14, 2018** will not be accepted for any reason.

All applications must include "from" and "to" employment dates (month/day/year), time base, and applicable civil service class titles. Applications received without this information will be rejected.

Dates printed on Mobile Bar Codes, such as the Quick Response (QR) Codes available at the USPS, are not considered Postmark dates for the purpose of determining timely filing of an application.

# **EXAMINATION INFORMATION**

In order to obtain a position on the eligible list, applicants must receive a minimum rating of 70% on the examination. *This exam will consist of the following*:

# STRUCTURED INTERVIEW (QUALITY APPRAISAL PANEL) WEIGHTED AT 100%

In this type of exam candidates will be asked pre-determined, job-related questions by a three-person panel and rated against pre-determined benchmarks. *Candidates will be provided with scratch paper and a pencil.* 

It is anticipated exams/interviews will be held in JANUARY / FEBRUARY 2019.

# SPECIAL TESTING ARRANGEMENTS

If you have a disability and need special testing arrangements, mark the appropriate box on the application and/or contact the Department of Forestry and Fire Protection at (916) 445-7824.

### **MINIMUM QUALIFICATIONS**

#### **EDUCATION:**

Equivalent to graduation from college with a major in civil, chemical, mechanical, or petroleum engineering. (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).

Work experience performing responsible engineering duties in hazardous liquid, petroleum, or natural gas pipeline safety may be substituted for the required education on a year-for-year basis.

# **ADDITIONAL QUALIFICATIONS**

Possession of a valid driver's license of the appropriate class issued by the Department of Motor Vehicles and good driving record. Applicants who do not possess the license will be admitted to the examination but must secure the license prior to appointment.

# **ELIGIBLE INFORMATION**

A Departmental eligible list will be established for the Department of Forestry and Fire Protection. This list will be abolished 12 months after it is established unless the needs of the service and conditions of the list warrant a change in this period.

#### REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

**NOTE:** Accepted applicants are required to bring either a photo identification card or two forms of signed identification to the examination AND the notice to appear showing the scheduled date and time of the exam.

#### POSITION DESCRIPTION

This is the entry, training, and full journey level in the series. Under close supervision, incumbents learn and perform the more routine and less complex technical review and inspection work. Under general supervision, as a full journey level, incumbents independently perform the more difficult and complex field and office technical review and inspection work for ensuring the compliance with pipeline safety laws and regulations.

# **KNOWLEDGE, SKILLS, AND ABILITIES**

#### Knowledge of:

- 1. Nationally recognized hazardous liquid pipeline standards, associations, regulations, and laws relating to the hazardous liquid pipeline industry to ensure compliance.
- 2. The National Fire Protection Association codes as it pertains to hazardous liquid pipelines, hazardous liquid pipeline facilities, and storage tanks to ensure compliance.
- 3. Reference manuals and regulations that have been adopted by the hazardous liquid pipeline industry to perform successful hazardous liquid pipeline inspections.
- Hazardous liquid pipeline operation and maintenance to enforce Federal and State laws and regulations.
- 5. Standards and regulations that have been adopted by the State and Federal agencies to perform successful hazardous liquid pipeline inspections.
- 6. Potential work hazards encountered during the performance of field duties for personal and public safety.
- 7. Investigation practices and techniques for a thorough and complete hazardous liquid pipeline accident investigation.
- 8. Safety precautions involved in hazardous liquid pipeline activities to ensure personal and public safety.
- 9. Principles of combustion and causes of fire to understand hazardous liquid pipeline malfunction during an investigation.
- 10. Fundamentals of engineering as applied to hazardous liquid pipeline safety work to ensure safe hazardous liquid pipeline operation.

- 11. Hazardous liquid pipeline safety codes to understand which section has been violated if a deficiency is found.
- 12. Hazardous liquid pipeline terminology and principles for proper application to the job.
- 13. Accepted hazardous liquid pipeline repair methods to ensure safe operation.
- 14. Basic electrical principles for cathodic protection to ensure safe job performance.
- 15. Various methods of hazardous liquid pipeline testing to determine hazardous liquid pipeline integrity.
- 16. Knowledge of fire protection principles and practices to monitor and enforce compliance with hazardous liquid pipeline safety regulations.
- 17. Proper grammar, spelling, punctuation, and sentence structure to ensure that written materials are complete, concise, and error-free.
- 18. The State Fire Marshal mission and strategies to protect life and property through the application of fire prevention, education, and enforcement.
- 19. Various hazardous liquid pipeline organizations the Department interacts with to understand their purpose as it relates to hazardous liquid pipeline safety.

#### Skill to:

- Operate all information technology devices for correspondence, effective job performance, and communication.
- 2. Operate software to electronically compile and analyze data, produce reports, and manage operations.

## Ability to:

- Inspect hazardous liquid pipelines to ensure compliance with all Federal and State hazardous liquid pipeline safety laws and regulations.
- 2. Perform basic engineering calculations to ensure hazardous liquid pipelines are designed, constructed, maintained, and operated in a safe manner.
- 3. Analyze hazardous liquid pipeline design specifications and plans to understand properties of the hazardous liquid pipeline.
- 4. Work in a variety of hazardous situations on the job using safety protocol and personal protective equipment.
- 5. Prepare accurate, clear, concise, and well-written reports and correspondence for an effective job performance.
- 6. Travel long distances in emergency and non-emergency circumstances to accomplish the responsibilities of the Department.
- 7. Work independently with minimal supervision for an effective job performance.
- 8. Follow oral and written directions for an effective job performance.
- 9. Read and write effectively to exchange information and accomplish daily tasks.
- 10. Write technical reports to accurately report and summarize findings.
- 11. Assess technical and administrative data to develop reports, briefings, and other documents.
- 12. Analyze situations and recommend an effective course of action for hazardous liquid pipeline safety and an effective job performance.
- 13. Make sound decisions under extreme situations to ensure duties are completed safely.
- 14. Check hazardous liquid pipelines for problems to ensure public safety and compliance with Federal and State hazardous liquid pipeline safety laws and regulations.
- 15. Read and interpret reference manuals, training materials, data, and correspondence to acquire knowledge essential to the performance of the job.
- 16. Work and adapt to a changing work environment to ensure Department's mission is covered.
- 17. Maintain professional demeanor to represent the Department in a positive manner.
- 18. Work effectively with various types of personalities.
- 19. Recognize hazardous situations and conditions to avoid personal injury.
- 20. Manage workload and time in order to prioritize for a successful job performance.
- 21. Work as part of a team on hazardous liquid pipeline incidents and non-emergency situations to ensure appropriate procedures are performed.

- 22. Understand and apply new and evolving hazardous liquid pipeline testing technologies and new regulations.
- 23. Facilitate meetings to achieve goals of the Department and disseminate information to stakeholders.
- 24. Make oral presentations to educate and inform stakeholders on hazardous liquid pipeline safety and regulations.

# PERSONAL CHARACTERISTICS

#### Willingness to:

Work non-scheduled hours including weekends and holidays; maintain Federally mandated educational requirements to ensure effective job performance; learn and adapt; wear job-required attire and personal protection equipment; drive across the state for long distances; work in remote locations and/or adverse conditions in emergency and non-emergency situations; may be on 24-hour call; alertness and keenness of observation.

#### **VETERANS' PREFERENCE**

Veterans' Preference will be granted for this examination, pursuant to Government Code section 18973.1, effective January 1, 2014 as follows: 1) Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an entrance examination, shall be ranked in the top rank of the resulting eligibility list. Any veteran who has been dishonorably discharged or released is not eligible for Veterans' Preference. 2) An entrance examination is defined, under the law, as any open competitive examination. And 3) Veterans' Preference is not granted once a person achieves permanent civil service status. Veteran status is verified by the California Department of Human Resources (CalHR). Directions to apply for Veterans' Preference are on the Veterans' Preference Application (Std. Form 1093), which is available at <a href="https://jobs.ca.gov/CalHRPublic/Landing/Jobs/VeteransInformation.aspx">https://jobs.ca.gov/CalHRPublic/Landing/Jobs/VeteransInformation.aspx</a>, and the Department of Veterans Affairs.

# **CONTACT INFORMATION**

Department of Forestry and Fire Protection P.O. Box 944246 Sacramento, California 94244-2460 (916) 445-7824 CALFIREexams@fire.ca.gov

TDD is Telecommunications Device for the Deaf and is reachable only from phones
Equipped with a TDD Device
1 (800) 735-2929 (TT/TDD) 1 (800) 735-2922 (Voice)
STS is Speech-to-Speech Service for persons with a speech disability and is reachable at
1 (800) 854-7784 (California) or 1 (800) 947-8642 (Nationwide)

# **GENERAL INFORMATION**

For all examinations (with or without a written feature), it is the candidate's responsibility to contact the Department of Forestry and Fire Protection, (916) 445-7824, three weeks after the cut-off/final filing date if he/she has not received a progress notification or notice to appear.

If a candidate's notice of oral interview or performance test fails to reach him/her three days prior to their scheduled appointment due to a verified postal error, he/she will be rescheduled upon written request.

EXAM BULLETIN – PIPELINE SAFETY ENGINEER EXAM CODE – 8FS0601 FINAL FILING DATE - DECEMBER 14, 2018 **Examination Locations:** When a written test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. However, locations of interviews or performance evaluations may be limited or extended as conditions warrant.

**Applications are available online** at CalHR, local offices of the Employment Development Department and the testing Department on this job bulletin.

**If you meet the requirements** stated on this bulletin, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

The Department of Forestry and Fire Protection 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 competitors will be notified.

**General Qualifications:** Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the classification. 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) service-wide 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.

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

**Confidentiality and Security:** Pursuant to Government Code Sections 19680(c) and 19681(b) it is unlawful to copy and/or furnish confidential examination material for the purpose of either improving or injuring the chances of any person or to obtain examination questions or other examination material before, during, or after an examination. Every person violating these provisions is guilty of a misdemeanor, and adverse action will be pursued. This may result in the person being barred from competition in future examinations, withheld from certification lists, or cancellation of eligibility for employment in State civil service.