



WATER AND SEWAGE PLANT OPERATOR, DEPARTMENT OF FORESTRY AND FIRE PROTECTION (SAFETY)

9FS08

DEPARTMENT(S):	Department of Forestry & Fire Protection
OPENING DATE:	February 7, 2019
FINAL FILING DATE:	March 8, 2019
EXAM TYPE:	Open
SALARY:	\$6,501.00 – \$6,826.00
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 March 8, 2019.

HOW TO APPLY

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

- [Examination/Employment Application \(STD.678\)](#). This can also be found on the California Department of Human Resources' website. *You may submit your application by mail or in person.*

SUBMIT BY MAIL:

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

SUBMIT IN PERSON:

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

DO NOT SUBMIT APPLICATIONS VIA E-mail

Applications postmarked or personally delivered after the final filing date, **March 8, 2019**, will not be accepted for any reason.

All applications/resumes must include “from” and “to” employment dates (month/day/year), time base, and applicable civil service class titles. Applications/resumes 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 - 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 **April/May 2019**

PLEASE NOTE

All exam questions are based on the Knowledge, Skills and Abilities listed in this bulletin and the [WASPO Class Specification](#) which is located on the CAL HR website.

CANDIDATES WHO DO NOT APPEAR FOR THE INTERVIEW WILL BE DISQUALIFIED.

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

Possession of a valid State of California Wastewater and Water Treatment Plant Operator Certification issued by the State Water Resources Control Board (Grade I or Grade II) and State Department of Health Services (Grade 1 or Grade 2). (Applicants who are within six months of obtaining the required certification will be admitted to the examination but must secure and provide evidence of certification prior to appointment.)

And

**EXAM BULLETIN – WATER AND SEWAGE PLANT OPERATOR
EXAM CODE – 9FS08 FINAL FILING DATE 03/08/19**

Either I

Completion of a recognized apprenticeship for Stationary Engineers. (Apprentices who are within six months of completing their apprenticeship program may be admitted to the examination but must provide evidence of completion prior to appointment.)

Or II

Experience: Four years of experience performing duties which may include the operation and maintenance of water and sewer systems; maintenance and repair of plumbing, boiler, heating, refrigeration, ventilation, laundry, and shop and power equipment of commercial, industrial, or institutional buildings, including the operation and maintenance of air conditioning systems involving the use of automatic controls; and repair of various mechanical equipment, in addition to performing minor building construction and maintenance.

And

Education: Completion of 670 hours of formalized technical instruction relating to Stationary Engineering in training offered by such established programs as: Job Corps; Skill Centers; ROP; Trades Schools; Military; and Joint Training Partnership Act. (An Associate of Arts or Certificate in Mechanical Electrical Technology, which must have included at least 12 semester units of instruction in heating, ventilation, and refrigeration systems involving the use of automatic controls, may be substituted for the 670 hours of technical instruction. Students who are within six months of completing their degree will be admitted to the examination, but they must provide evidence of completion prior to appointment.) (Two years of additional qualifying experience may be substituted for the required education.)

Additional Instructions:

Include all that apply in application packet:

- Copy of all certifications used to qualify in patterns listed above, (State of CA Wastewater & Water Treatment Plant Operator Certification, State Department of Health Services Certification)
- Transcripts showing units completed or copy of degree earned
- Certification grades and numbers must be listed on application (STD 678) under section titled "Licenses"

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 each phase of the examination AND the notice to appear showing the scheduled date and time of the exam.

POSITION DESCRIPTION

A Water and Sewage Plant Operator, under general direction in a conservation camp in the Department of Forestry and Fire Protection, is to perform a variety of skilled work in the operation, maintenance, and repair of a water/wastewater treatment plant, water, sewer, heating, boiler, air conditioning, ventilating, lighting, power, and other mechanical systems normally found in a State conservation camp facility; to work closely with Region, Headquarters facility planners, and various control agencies on facility maintenance problems and code requirements; to maintain order and supervise the conduct of inmates or wards; to instruct or lead inmates, wards, or resident workers in facilities maintenance while protecting and maintaining the safety of persons and property; and to do other related work.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

1. Proper sampling and handling techniques for water and/or wastewater laboratory testing to comply with regulatory guidelines, specifications, and operational needs.
2. Water and wastewater treatment principles to ensure compliance with all health standards.
3. Routine tests techniques on water samples to ensure proper operation of water treatment processes.
4. Chemical dosages used for the treatment of water to ensure proper disinfection and maintain chlorine residual in the distribution system.
5. Chemical dosages used for the treatment of water to ensure compliance with water quality standards.
6. Applicable laws and regulations that apply to the Department's water and wastewater treatment plants.
7. Water and/or wastewater treatment and effluent disposal to ensure safe and effective operation.
8. Water distribution systems to ensure safe and effective operation.
9. Wastewater treatment processes to ensure operational effectiveness.
10. Routine tests, Sludge Volume Index (SVI) techniques on wastewater samples to ensure proper operation of wastewater treatment processes.
11. Appropriate use of Personal Protective Equipment (PPE) to ensure health and safety.
12. Water treatment processes to ensure compliance with drinking water safety standards.
13. Personal Protective Equipment (PPE) maintenance to ensure health and safety.
14. Potential risks associated with working a prison environment.
15. Troubleshooting techniques to diagnose electrical and mechanical equipment problems associated with water and/or wastewater treatment plants to ensure operational readiness.
16. Specialized equipment used for the treatment of potable water to ensure compliance with all health standards.
17. The materials and principles used in the operation of water distribution systems in accordance with applicable laws and regulations.
18. The Department's safety procedures and programs to ensure personnel safety and compliance with Federal and State law.
19. Maintenance and repair techniques and procedures of water distribution systems to ensure effective operation in accordance with applicable laws and regulations.
20. Jobsite safety practices to ensure personnel safety while completing assignments to ensure compliance in accordance with the Department's Injury and Illness Prevention Program (IIPP).
21. Confined spaces as they apply to water and wastewater plants to ensure compliance in accordance with applicable laws and regulations and Department policies and procedures.
22. Applicable laws and regulations as it pertains to inmates/wards interaction and supervision to ensure safe work environment.
23. The equipment used for the disposal of wastewater effluent to ensure safe and effective operation in accordance with applicable laws and regulations and Department policies and procedures.
24. Basic mathematical calculations for effective job performance.
25. Federal and State health and safety practices to maintain a safe work environment in accordance with Department policies and procedures.
26. Safe handling and disposal of hazardous materials used for maintenance and repairs to ensure a safe and well maintained plant.
27. Safety procedures to ensure safe and effective operation in accordance with Department policies and procedures.
28. Tools and equipment to ensure safe and effective repairs are completed.
29. The maintenance of wastewater collection systems to ensure safe and effective operations in accordance with Department policies and procedures.
30. The repair of wastewater collection systems to ensure safe and effective operations in accordance with Department policies and procedures.
31. Materials and tools used in the maintenance and repair of wastewater collections systems in accordance with applicable laws and regulations.
32. Industry specific terminology to communicate effectively.
33. Advanced mathematical calculations for effective job performance.

34. Equipment inventory management to maintain adequate supplies for common repairs to ensure safety and operational readiness.
35. Basic supervisory principles and practices to ensure the efficient operation of the water and/or wastewater treatment plant.
36. Parts and supply requisitioning to conduct efficient and timely repairs.
37. Writing elements to ensure that written materials are complete, concise, and error free.
38. Non-hazardous materials used for maintenance and repairs to ensure safe and well maintained plants.
39. Computer programs as needed for job performance to ensure compliance with department policy.
40. Defensive driving techniques to safely operate Department vehicles.
41. Required training to enhance knowledge, skills, and abilities.
42. Inspection methods and criteria to approve the work of others.
43. Mobile communication devices for effective communication.

Skill to:

1. Efficiently operate water and/or wastewater plants.
2. Maintain the safety and security of an area and inmates/wards assigned.
3. Operate equipment to ensure safe and effective operation.
4. Read, write, and speak English at a level required for successful job performance.
5. Properly utilize Personal Protective Equipment (PPE) for safe and effective operation and use.
6. Effectively supervise the work of inmates/wards.
7. Properly lift tools and equipment to prevent personal injury and damage to equipment.
8. Operate various tools for safe and effective use.
9. Operate a personal computer in order to accomplish job duties and ensure effective job performance.
10. Communicate effectively in order to exchange and/or provide information and/or direction.
11. Effectively instruct and train inmates/wards on duties as assigned.
12. Multitask during emergency and non-emergency situations.
13. Move in various ways in order to complete jobs, tasks, and projects.
14. Produce written correspondence to effectively convey information.
15. Use communication equipment for effective communication in emergency and non-emergency situations

Ability to:

1. Maintain water integrity in storage vessels and distribution systems to ensure safety and health standards are met.
2. Ability to interpret laboratory test results and analyses to determine if water and/or wastewater treatment plants meet compliance with regulatory permit requirements.
3. Properly store and transport prepared water and/or wastewater samples in appropriate timeframe for delivery to testing facility as required by Federal and State guidelines.
4. Properly collect and label water and/or wastewater samples for laboratory and routine testing.
5. Complete proper water and/or wastewater sample documentation for laboratory testing.
6. Ensure water and/or wastewater samples are tested and analyzed at State certified laboratories to meet compliance with regulatory permit requirements.
7. Perform routine tests on water samples to ensure proper operation of water treatment processes.
8. Interpret permits issued by the regulatory agencies to ensure compliance with discharge permits.
9. Keep accurate records to successfully complete documentation and follow record retention schedules.
10. Operate equipment associated with water and/or wastewater treatment systems to ensure safe and effective operation.
11. Follow directions to ensure successful completion of work assignments.
12. Communicate effectively with peers, staff, inmates, and control agencies to ensure safe and effective operation.
13. Monitor and evaluate effluent disposal to meet discharge requirements.
14. Ensure the installment of equipment associated with water and/or wastewater treatment systems to ensure effective operation.
15. Ensure repairs are made to equipment associated with water and/or wastewater treatment systems

- in order to keep systems operational.
16. Recognize and report the need for changes of the water and/or wastewater processing systems to ensure compliance in accordance with regulatory laws, regulations, and permits.
 17. Read and understand various written materials to ensure proper completion or work assignments.
 18. Ensure the repair of equipment associated with water and/or wastewater treatment systems to keep systems operational.
 19. Ensure the repair of electrical and mechanical equipment problems relating to water and/or wastewater treatment processes to meet regulatory requirements.
 20. Perform routine tests on wastewater samples to ensure proper operation of wastewater treatment processes.
 21. Analyze situations and take appropriate action in emergency and non-emergency situations to ensure a safe and effective work environment.
 22. Recommend changes needed of the water and/or wastewater processing systems to ensure compliance in accordance with regulatory laws, regulations, and permits.
 23. Identify potential problems that may impact work performance and present solutions in order to minimize operational interruptions.
 24. Use tact and diplomacy when working with people of different perspectives and viewpoints.
 25. Use and direct the use of appropriate Personal Protective Equipment (PPE) to ensure personnel safety.
 26. Troubleshoot electrical and mechanical equipment problems relating to water and/or wastewater treatment processes to meet regulatory requirements.
 27. Ensure the installment of equipment associated with electrical systems to maintain water and/or wastewater treatment plants.
 28. Evaluate water flow needs required by individual facility usage.
 29. Implement and enforce workplace safety procedures as they apply to excavating situations.
 30. Maintain cooperative relationships with individuals and organizations to meet Department goals and objectives.
 31. Train inmates and/or wards on safety practices to ensure safe and effective operation.
 32. Interpret plan, drawings, and specifications to successfully complete work assignments.
 33. Train inmates/wards in the proper operation of water treatment plants to ensure compliance.
 34. Write documents to communicate with various audiences.
 35. Train inmates/wards in the proper collection and handling of water and/or wastewater sampling for analysis to ensure water quality and compliance.
 36. Train inmates/wards on laboratory procedures to ensure water quality and compliance.
 37. Train inmates/wards as an Operator in Training (OIT) in the proper operation of wastewater treatment plants to ensure compliance.

PERSONAL CHARACTERISTICS

Willingness to:

Persons in positions in this class must possess a willingness to maintain appropriate certificates and licenses; willingness to work in a prison environment; willingness to work as part of a team to facilitate the mission of the Department; willingness to take on the sole responsibility for the protection of personnel and property; willingness to take on the sole responsibility for the supervision of inmates/wards assigned to water and/or wastewater plants; willingness to follow chain of command; willingness to perform other duties as required as related to water and/or wastewater plants; willingness to properly utilize Personal Protective Equipment (PPE) for safe and effective operation and use; willingness to work independently to facilitate the mission of the Department; willingness to remain alert at all times; willingness to work with and/or around inmates/wards; willingness to be tested for Tuberculosis (TB); willingness to comply with the Departments code of conduct; willingness to make safe and effective decisions in the performance of the job; willingness to work around electrical equipment that automatically starts and stops; willingness to correct unacceptable work or conduct performed by inmates/wards; willingness to direct the work of others; willingness to monitor water and/or wastewater plants for contraband on a daily basis to ensure the safety and security of the institution and public; willingness to work closely with vendors; willingness to monitor inmates/wards on a daily basis to ensure the safety and security of the institution and public; willingness to cooperate with others to complete a common goal and/or objective; willingness to inspect and approve the work of others; willingness to work daily in a remote location; willingness to participate in training sessions to increase technical, administrative, and manipulative skills; willingness to work with hazardous materials while wearing Personal Protective Equipment (PPE); willingness to establish and maintain cooperative relationships with Department employees and the public to meet the mission of the Department; willingness to work on a computer to complete various tasks and assignments; willingness to perform job duties

in extreme temperatures, weather, and locations to meet the needs of the Department; willingness to perform duties in restricted spaces, willingness of possible exposure to communicable diseases, willingness to assist in the training of others; willingness to perform job duties for extended periods of time; willingness to remain on duty longer than scheduled shift to meet workforce needs; willingness to instruct others in matters of operation and servicing of equipment and systems pertaining to the water and/or wastewater plants; willingness to work long, irregular hours to ensure proper safe and effective operation of water and/or wastewater plants; willingness to be fit for duty while on call to meet workforce needs; willingness to move in various ways in order to complete jobs, tasks, and projects; willingness to maintain uniform standards per Department policies and procedures; willingness to wear a uniform per Department policies and procedures; willingness to maintain Department grooming standards; willingness to maintain adequate fitness to meet the requirements and needs of the Department; willingness of possible exposure to traumatic and/or graphic situations; willingness to be away from family for an extended period of time to ensure safe and effective operations; willingness to travel long distances to meet the needs of the Department.

Jobs in this class are in Department of Forestry and Fire Protection conservation camps which are located in remote, isolated areas of California that preclude using existing local municipal water or wastewater systems. The camps have their own drinking water supply and treatment systems, along with on-site wastewater disposal systems that serve the inmate population as well as State staff. Assignments may include sole responsibility for the lead and instruction of inmates, wards, or resident workers and/or the protection of personal and real property.

Person's appointed to positions in this class must be reasonably expected to have and maintain sufficient strength, agility, and endurance to perform during stressful (physical, mental, and emotional) situations encountered on the job without compromising their health and well-being of that of their fellow employees or that of inmates or wards.

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 [CAL HR Veterans Information](#) , 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.

EXAM BULLETIN – WATER AND SEWAGE PLANT OPERATOR
EXAM CODE – 9FS08 FINAL FILING DATE 03/08/19

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.

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.

How to apply for Veterans' Preference: The California Department of Human Resources (CalHR) has information on how to apply for Veterans' Preference at [CAL HR Veterans Information](#), and the Application for Veterans' Preference Application for (CalHR 1093). Additional information is also available on the [Department of Veterans Affairs](#) website.

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.