

# **Vector Ecologist**

## **San Joaquin County Mosquito and Vector Control District**

**FILING DEADLINE:** March 17, 2017 or until filled

### **Application Process**

Interested individuals should submit a cover letter and a complete and current resume/CV that includes three verifiable references. Those invited to be interviewed will be required to complete a District employment application form. Please direct all correspondence to:

**San Joaquin County Mosquito and Vector Control District**  
**Attn: Eddie Lucchesi, Manager**  
**7759 South Airport Way**  
**Stockton, CA 95206**

Or electronically:

[elucchesi@sjmosquito.org](mailto:elucchesi@sjmosquito.org)

**SUMMARY:** Under the general direction of the Entomologist or his/her designee, the Vector Ecologist assists with a variety of routine and standard biological and entomological activities to support the District's vector surveillance and control program, vector-borne disease surveillance and prevention program, and relative research projects; and perform related laboratory and field work as required.

### **ILLUSTRATIVE TASKS include but are not limited to:**

- Prepares, maintains, collects and analyzes vector surveillance traps; sorts, identifies and prepares vector specimen and other related biological materials.
- Assists in the District's pesticide resistance monitoring program.
- Assists in the calibration of pesticide application equipment, and in the operation of related instruments.
- Assists in the District's Invasive *Aedes* surveillance program.
- Assists in testing and evaluating new technology in vector-borne disease surveillance and control, as well as providing assistance and support to other District laboratory and vector control personnel.
- Assists in maintaining laboratory colonies of mosquitoes and other invertebrates used for scientific and operational purposes.
- Maintains detailed and accurate records of surveillance activities, testing, experimental and scientific results; compiles data for reports and scientific publications; uses computer for data input and analysis.

Tuesday, January 31, 2017

- Uses, maintains and cares for standard laboratory equipment, instruments, tools and facilities used in connection with the work.

## **MINIMUM QUALIFICATIONS:**

**Education / Experience:** Bachelor's degree or other 4-year college degree in entomology, biology, ecology or other closely related fields, **or**

Graduation from an accredited college or university with completion of college-level laboratory courses in general biology, entomology or closely related fields and three (3) years vector-borne disease surveillance work experience.

**License:** Possession and maintenance of a valid California Department of Motor Vehicles Driver's License. Incumbent must be insurable and maintain insurability by the District's insurance provider during the course of employment.

**Certificate:** Possession and maintenance of California Department of Public Health Vector Control Certification in categories "B" (Mosquito Control) and "C" (Terrestrial Invertebrates); required within 12 months of initial employment.

**Knowledge of:** Basic principles and practices of vector and vector-borne disease surveillance and control; mosquito and vector biology; methods of collecting, rearing, and processing field and laboratory specimens, Biological principles; chemistry and Mathematics; techniques and terminology used in a laboratory; general principles and methodologies involved in scientific investigations; Laboratory hazards; proper safety procedures in both field and lab settings; Safe use and handling of pesticides and other job-related chemicals; use and care of laboratory equipment; quality assurance and quality control procedures; record keeping principles and techniques.

**Ability to:** Plan and perform the required tasks with minimal supervision and maintain detailed and accurate records; conduct field and laboratory tests and evaluations; maintain insect colonies; perform vector-borne disease surveillance and investigation; provide pesticide resistance testing assistance; operate and maintain lab equipment; follow written and oral direction; perform mathematical calculations and formulations to set and compile results in vector surveillance projects; communicate effectively in English with the public and fellow employees; establish and maintain effective working relationships; use PC-based computers and software (word processing, spreadsheet, database, presentation and statistical analysis). Perform other duties as required.

## **PHYSICAL AND MENTAL REQUIREMENTS:**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

- Ability to frequently\* lift and/or move up to 10 pounds, regularly\* lift and /or move up to 25 pounds, periodically\* lift and/or move up to 50 pounds, and occasionally\* lift and/or move up to 75 pounds.
- Ability to demonstrate measurable visual depth perception and color vision and have a minimum of single ear aided hearing
- Ability to demonstrate physical stamina to frequently\* operate a motor vehicle and show coordination of eye/hand/foot; use fine manipulation by hand
- Ability to regularly\* stand for extended periods of time and sit for extended periods of time
- Ability to wear protective equipment such as hip waders, respirator, goggles, and rubber boots and gloves, as needed
- Ability to work alone at times and/or without direct supervision
- Ability to tolerate insect bites
- May be required to be vaccinated for various diseases to which employee may be exposed in the course of work
- Ability to regularly\* walk on even surfaces
- Ability to regularly\* traverse uneven ground such as fields, dirt banks, stream beds, and shallow ponds perform repetitive motion associated with computer usage, may need to bend, twist, crawl, balance, lift, push, perform simple grasping, power grip, squat, crouch, kneel, reach, climb, pull, and smell

\*Occasionally – Activity or condition exists up to 25 percent of the time

Periodically – Activity or condition exists from 25 to 50 percent of the time

Regularly – Activity or condition exists from 50 to 75 percent of the time

Frequently – Activity or condition exists 75 percent or more of the time

## **ENVIRONMENTAL CONDITIONS**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee frequently works in field settings and is frequently exposed to wet and/or humid conditions, low and/or high temperatures, and other inclement weather conditions.

The employee may be exposed to hazards which include insect bites, toxic or caustic chemicals, fumes, dust, hazardous control materials, vectors and vector-borne diseases, rough terrain,

vicious animals, poisonous plants and animals. The noise level in the work environment is usually moderate.

## **EXAMINATION AND SELECTION PROCESS**

Selection of applicants for interviews will be based on evaluation of training, education and experience related to the class specification for this position. Those candidates selected for interviews will receive an oral interview and panel review to assess training, experience and ability to perform the duties of the position. Selection will be based on a combined overall assessment of the oral interview and panel review.

All qualified applicants will be considered for employment without regard to race, color, national origin, religion, gender, or sexual orientation. Please contact the District at least five (5) working days before a scheduled examination or interview if you require accommodation in the examination or interview process.

## **COMPENSATION**

The base salary range for this position is \$2,196.64 - \$2,670.02 biweekly (approximately \$57,112.64 - \$69,420.52 annually). The District provides a comprehensive benefits package, including longevity pay, insurance (health/dental/vision/life/STD/LTD), retirement, paid leave (vacation, sick), and holiday schedule.