

CONSOLIDATED MOSQUITO ABATEMENT DISTRICT**VECTOR BIOLOGIST****Position Definition, Description and Characteristics:**

Under the direction of the District Manager and Director of Science and Outreach, the Vector Biologist performs professional, biological work related to the surveillance and control of mosquitoes, other vectors and vector-borne diseases; and assists in work related to public information, education and outreach. The Vector Biologist is responsible for conducting and executing various aspects of the District's scientific and technical programs by applying the knowledge associated with the disciplines of entomology, biology, ecology, microbiology and biostatistics and the principles of scientific methodology, and for designing and conducting research projects. The Vector Biologist assists in training and supervision of staff within these programs, serves as a technical advisor to District staff and to the public, and serves as the District's Safety Officer. The position is largely self-directed and supervises the work and activities of seasonal and temporary surveillance and laboratory assistants.

Example of Duties:

- Assists with planning and implementing the various elements of the District's mosquito and mosquito-borne disease surveillance programs;
- Performs scientific investigative studies, evaluations and analyses, uses interpretive and statistical methods to evaluate data, and prepares reports and recommendations associated with components of District activities and programs;
- Collects, identifies and processes mosquito and vector specimens, conducts population surveys and vector distribution studies, performs vector-borne disease surveillance as required, evaluates the health significance of vector populations and recommends control measures;
- Compiles and maintains records associated with the District's surveillance program and disseminates them to appropriate personnel;
- Investigates tolerance and resistance of mosquitoes and vectors to pesticides and recommends changes in control measures as indicated;
- Assists with planning and implementing the District's information and public education/awareness programs, including community and media events and school classroom presentations;
- Supervises the work performance of certain District personnel;
- Keeps informed and knowledgeable in scientific arenas and on current developments in mosquito and vector control, and participates and presents reports and research findings at conferences and meetings as required;
- Collaborates with University faculty and researchers in development and execution of relevant vector research projects and proposals;
- Collaborates with outside agencies to coordinate and facilitate the work of the District;
- Performs, occasionally, other tasks or functions not stated in this description, but within the scope of experience and capability; and

- Performs related work as required.

Minimum Qualifications:

Education: Graduation from an accredited college or university with a Bachelor of Arts or Science degree in biology or related scientific field, and with coursework in entomology.

Experience: Experience working in vector control and/or demonstrating a working knowledge of vector surveillance programs and strategies and vector identification.

Licenses, Certifications, Examinations: Applicant must have a valid California Drivers License and have and maintain a good driving record, and be insurable under the District's insurance carrier.

Applicant must possess the ability to obtain and maintain a Mosquito Control Technician Certificate, a Vertebrate Control Certificate and a Terrestrial Invertebrate Vector Control Certificate from the California State Department of Public Health.

Applicant must successfully complete a pre-placement physical examination, respirator training and drug screen.

Knowledge of:

- Fundamentals and techniques of employee supervision;
- Organization and operation of a mosquito control district, use and application of pesticides for mosquito control and details and elements of vector and vector-borne disease surveillance ;
- Biological, chemical, and physical science principles at a working professional level;
- Fundamental mathematics, algebra, and biostatistics;
- Research techniques and investigative methods;
- Basic use and operation of Geographic Information System programs and data management;
- Basic use and operations of a Microsoft Windows®-based PC and MS Office® software;
- Scientific data and record keeping; and
- Correct English usage, spelling, grammar and punctuation; and principles of composition and report writing.

Ability to:

- Communicate with groups and individuals in a direct, honest, effective, and courteous manner, including individuals who are discourteous or angry;
- Work cooperatively with co-workers to resolve problems, issues or disagreements;
- Possess a high level of organizational skills;
- Keep on task and on time while working on multiple projects, programs and appointments;

- Keep subordinate staff on task and appointment schedules;
- Speak and write clearly and effectively in English;
- Collect and keep accurate, detailed records; and
- Read, understand, interpret, evaluate and apply laws, policies, rules, regulations, contracts, guidelines, and literature of the profession;

Essential Functions:

Incumbent must be able to perform routine work while using required safety equipment, including the use of a respirator.

Incumbent must be sighted, with the ability to demonstrate close vision, distance vision, peripheral vision and depth perception and have a minimum of single-ear aided hearing. Incumbent must have complete and normal mobility of arms to reach and to carry objects, and dexterity of hands to grasp and manipulate small objects. Incumbent must be able to stand, stoop, reach and bend, and to walk on uneven terrain, such as fields, dirt banks, natural and cement stream beds, and shallow ponds. Incumbent must be without physical limitations that would prevent climbing ladders and performing customary and usual activities associated with field operational mosquito surveillance and control activities. Incumbent must frequently lift and move up to 25 pounds, and occasionally lift and move up to 50 pounds.

Working Conditions:

While performing the duties of this position, the incumbent is frequently exposed to wet and/or humid conditions; moving mechanical parts; high, precarious places; fumes or airborne particles; toxic or caustic chemicals; and outside weather conditions. The incumbent may occasionally be exposed to toxic, noxious or irritating plants and venomous or potentially dangerous animals. The noise level in the work environment is usually moderate, but may occasionally be loud. The incumbent may be called on for evening and weekend work, as assigned.