

# California Vector Control Technician Certification and Training Program Guidelines



California Department of Public Health  
Vector-Borne Disease Section

Updated June 2019



## TABLE OF CONTENTS

I. Introduction	3
II. Certification Program Authority	3
III. Standards Governing Certification	6
IV. Article 1 – Certification Definitions	7
V. Article 2 – Certification Examination	9
VI. Article 3 – Continuing Education	13
VII. Continuing Education Curriculum Course Description	15
VIII. Composition and Responsibilities of the Continuing Education Committee	17
IX. Policy and Procedure for Approval of Continuing Education Program	17
X. Maintenance of Training Records	19
XI. Certification and Training Website	22
XII. Additional Information	23
Appendix A “Continuing Education Sign-In Sheet”	24
Appendix B “Continuing Education Log”	25
Appendix C “How to Scan Gold Card Certification numbers”	26
Appendix D “Gold Card Barcode Generator Instructions”	27

# CALIFORNIA VECTOR CONTROL TECHNICIAN CERTIFICATION AND CONTINUING EDUCATION GUIDE

## I. Introduction

This guide is designed to assist vector control agency managers, training officers, and others responsible for providing certification and continuing education training for public health certified vector control technicians. In 1988, the California State Legislature enacted changes and additions to the California State Health and Safety Code, which substantially modified the training requirements for Certified Technicians in the State. The law, which was AB4114 (1988), became Sections 403, 2202, and 2805 of Chapter 1010 of the California State Health and Safety Code, and took effect July 1, 1989. Through further legislation, including the most recently chaptered Mosquito Abatement and Vector Control District Act of 2002, these sections have subsequently become Sections 106925, 2052 (a), and 2805 (a), respectively. References to their locations in the Health and Safety Code are as follows:

Division 104 – Environmental Health, Part 1 – Environmental Health Personnel, Chapter 4 – Professional Certification, Article 4 – Vector Control Technicians, Section 106925;

Division 3 – Pest Abatement, Chapter 1 – Mosquito Abatement and Vector Control Districts, Article 4 – Powers, Section 2052 (a);

Division 3 – Pest Abatement, Chapter 8 – Pest Abatement Districts, Article 1 – Definitions and General Provisions, Section 2805 (a).

## II. Certification Program Authority

### Title 3 of the California Code of Regulations, Section 6000

The principal State laws governing pesticides and pesticide use are located in the California Food and Agricultural Code administered by the California Department of Pesticide Regulation (CDPR). The Department of Pesticide Regulation has delegated the responsibility of regulating the public health use of pesticides to the California Department of Public Health (hereafter known as CDPH). Title 3 of the California Code of Regulations, Section 6000 (c) recognizes the CDPH “Certified Technician” as a “certified commercial applicator” (see below). However employee certification must be coupled with an

agency that is signatory to the CDPH "Cooperative Agreement" supporting proper pesticide use. The Cooperative Agreement is authorized by [Health and Safety Code, Section 116180](#) (not shown in this document).

[https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?sectionNum=116180.&lawCode=HSC](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=116180.&lawCode=HSC)

California Code of Regulations, Title 3 – Food and Agriculture, Division 6 – Pesticides and Pest Control Operations, Chapter 1 – Pesticide Regulatory Program, Subchapter 1 – Definition of Terms, Article 1 – Definitions for Division 6, Section 6000 – Definitions:

**"Certified commercial applicator" means:**

- (a) A person holding a valid qualified license issued by the director of CDPR;
- (b) A pilot holding a valid journeyman pest control aircraft pilot's certificate issued by the director of CDPR;
- (c) A person holding a certified technician certificate issued by the Vector-Borne Disease Section of CDPH;
- (d) A person holding a valid structural pest control operator or field representative license issued by the Structural Pest Control Board of the Department of Consumer Affairs; and
- (e) A person holding a valid qualified applicator certificate by the director.

**Health and Safety Code, Section 116110**

Section 116110 (d) of the Health and Safety Code authorizes CDPH to maintain a training and certification program for government agency vector control technicians.

Division 104 – Environmental Health, Part 11 – Vectors, Chapter 2 – Powers and Duties, Article 1 – Vector Biology and Control, Sections 116110:

CDPH shall maintain a program of vector biology and control including, but not limited to, the following:

- (a) Providing consultation and assistance to local vector control agencies in developing and conducting programs for the prevention and control of vectors.
- (b) Surveillance of vectors and vector-borne diseases.
- (c) Coordinating and conducting emergency vector control, as required.
- (d) Training and certifying government agency vector control technicians.

- (e) Disseminating information to the public regarding protection from vectors and vector-borne diseases.

**Health and Safety Code, Section 106925**

Health and Safety Code Section 106925, except as otherwise provided, requires every governmental agency employee who handles, applies, or supervises the use of any pesticide for public health purposes to be certified by CDPH as a vector control technician in at least one relevant vector control category commensurate with the technicians assigned duties. This section requires applicant fees to take the certification examination. It requires these employees to accrue the minimum continuing education unit requirements to maintain their certification status and requires payment of annual continuing education renewal fees.

Division 104 – Environmental Health, Part 1 – Environmental Health Personnel, Chapter 4 – Professional Certification, Article 4 – Vector Control Technicians, Sections 106925:

- (a) Except as otherwise provided in subdivision (b) or (i), every government agency employee who handles, applies, or supervises the use of any pesticide for public health purposes, shall be certified by CDPH as a vector control technician in at least one of the following categories commensurate with assigned duties, as follows:
  - (1) Mosquito control.
  - (2) Terrestrial invertebrate vector control.
  - (3) Vertebrate vector control.
- (b) CDPH may establish by regulation exemptions from the requirements of this section that are deemed reasonably necessary to further the purposes of this section.
- (c) CDPH shall establish by regulation minimum standards for continuing education for any government agency employee certified under Section 116110 and regulations adopted pursuant thereto, who handles, applies, or supervises the use of any pesticide for public health purposes.
- (d) An official record of the completed continuing education units shall be maintained by CDPH. If a certified technician fails to meet the requirements set forth under subdivision (c), CDPH shall suspend the technician's certificate or certificates and immediately notify the technician and the employing agency. CDPH shall establish regulation procedures for reinstating a suspended certificate.

- (e) CDPH shall charge and collect a nonrefundable renewal fee of one hundred thirty-four dollars (\$143) to be paid by each continuing education certificiant on or before the first day of July, or on any other date that is determined by CDPH. Each person employed on September 20, 1988, in a position that requires certification, shall first pay the annual fee the first day of the first July following that date. All new certificants shall first pay the annual fee the first day of the first July following their certification.
- (f) CDPH shall charge and collect nonrefundable examination fees for providing examinations pursuant to this section. When certification is required as a condition of employment, the employing agency shall pay the fees for certified technician applicants. The fees shall not exceed the estimated reasonable cost of providing the examinations, as determined by the director.
- (g) CDPH shall collect and account for all money received pursuant to this section and shall deposit it in the Vectorborne Disease Account provided for in Section 116112. Notwithstanding Section 116112, fees deposited in the Vectorborne Disease Account pursuant to this section shall be available for expenditure, upon appropriation by the Legislature, to implement this section.
- (h) Fees collected pursuant to this section shall be subject to the annual fee increase provisions of Section 100425.
- (i) Employees of the Department of Food and Agriculture and county agriculture departments holding, or working under the supervision of an employee holding, a valid Qualified Applicator Certificate in Health Related Pest Control, issued by the licensing and certification program of the Department of Food and Agriculture, shall be exempt from this section.

**III. Standards Governing Certification of Local Vector Control Agency Personnel**

Whenever a law is enacted, a specific set of regulations must be developed and adopted to implement the law. In the case of the requirements of Health and Safety Code 106925, the regulations are part of Title 17 of the California Code of Regulations. The standards governing certification of local vector control agency personnel encompass Sections 30001 through 30061.

California Code of Regulations, Title 17 – Public Health, Division 1 – State Department of Public Health, Chapter 5 – Sanitation (Environmental), Subchapter 3 – Vector Control, Group 2 – Standards Governing Certification of

Local Vector Control Agency Personnel; Article 1 – Definitions; Article 2 – Certification Examination; Article 3 – Continuing Education:

**IV. Article 1 – Certification Definitions**

**30001 Certified Technician**

“Certified Technician” means any employee of a vector control agency who has passed CDPH' certification examination as specified in section 30055 and is required by section 30061 to obtain continuing education units in order to independently handle, apply, or supervise the application of any pesticide as part of such employee's official duties.

Note by CDPH: If CDPH relegates a signatory agency to non-signatory status (i.e. no Cooperative Agreement in effect), then the technician(s) at that agency will be relegated to Certified Technician (Limited) status.

A Certified Technician employed by a signatory agency who subsequently transfers to a public agency that is not signatory to a Cooperative Agreement will be allowed to complete the current continuing education cycle with Certified Technician status, although the technician may not be allowed to apply pesticides. At the beginning of the next continuing education cycle, the Certified Technician will be relegated to Limited status.

**30003 Certified Technician (Limited)**

“Certified Technician (Limited)” means any employee of a vector control agency who has passed CDPH's certification examination as specified in section 30055, but who is exempt under section 30061 from continuing education requirements. A Certified Technician (Limited) may not handle or apply a pesticide as part of his or her official duties except under the direct supervision of a Certified Technician, or as permitted under section 30061(d).

Note by CDPH: Certified Technicians are also downgraded because of: 1) failure to accrue the minimum continuing education unit requirement as required in section 30061, or 2) failure to pay annual continuing education renewal fees as required in Health and Safety Code 106925.

Individuals who wish to become a Certified Technician but are currently employed at a non-signatory agency will be listed as Certified Technician (Limited). If the agency becomes signatory or if the technician transfers to a signatory agency (within a reasonable time frame – at the discretion of CDPH, on

a case by case basis), CDPH can modify the technician's limited status certification standing to Certified Technician.

### **30005 Continuing Education Units**

"Continuing Education Unit (CEU)" means a unit value assigned to educational activities approved by CDPH equal to one unit for each 50 to 60 minute segment of instruction as determined by CDPH.

Note by CDPH: When there are multiple presentations of varying length, the minutes will be totaled by CEU category and then assigned a CEU.

Presentations that are 15-20 minutes in length will receive 0.25 CEU.

Presentations 21-40 minutes in length will receive 0.50 CEU. Presentations 41-49 minutes in length will receive 0.75 CEU. Presentations 50-60 minutes in length will receive 1.0 CEU.

### **30007 In-Service Training**

"In-Service Training" means training given within an agency on subjects directly related to vector control duties.

Note by CDPH: The "Handler Training" pursuant to Title 3, Food and Agriculture, of the California Code of Regulations, Section 6724 is an example of In-Service Training. To the contrary, however, Handler Training is not recognized as continuing education by CDPH because it is required training by the CDPR for every employee who handles pesticides and further, the employer is required to have a written training program for this purpose. At least 50% of the required units must be obtained through training given by speakers from other than the employing agency or through training programs sponsored by other than the employing agency.

### **30009 Pesticide Label**

"Pesticide Label" means the written, printed or graphic matter on, or attached to, the pesticide or device or any of its containers or wrappers.

### **30011 Relevant Vectors**

"Relevant Vectors" means those vectors normally included within a group of vectors falling within the category of each vector control certificate and which employee of a vector control agency may be expected to control when working within a particular certificate specialty.



**30013 Under the Direct Supervision of**

“Under the Direct Supervision of” means the act or process whereby a pesticide is applied by a Certified Technician (Limited) or a Vector Control Aide acting under the instructions and control of a Certified Technician who is responsible for the actions of that person and who is available if and when needed even though such certified technician is not physically present at the time the pesticide is applied. A Certified Technician shall be physically present during the application of a pesticide when required by the pesticide label.

**30015 Vector**

“Vector” means any animal that meets the definition of Section 116108 of the Health and Safety Code.

Note by CDPH: Section 116108. "Vector" means any animal capable of transmitting the causative agent of human disease or capable of producing human discomfort or injury, including, but not limited to, mosquitoes, flies, other insects, ticks, mites, and rats. See Health and Safety Code, Division 104 – Environmental Health, Part 11 – Vectors, Chapter 1 – Definitions.

**30017 Vector Control Aide**

“Vector Control Aide” means a person who is employed by a vector control agency but is not certified under Section 30055 and may not handle or apply a pesticide as part of his or her official duties except under the direct supervision of a Certified Technician or as permitted under Section 30061(d).

**30019 Vector Control Agency**

“Vector Control Agency” means any government agency, including but not limited to a mosquito abatement district, vector control district, pest abatement district, environmental health department, or public health department, which conducts an ongoing program within its jurisdiction to reduce vector populations in order to protect the public health and well-being.

**V. Article 2 – Certification Examination**

**30055 Examination Requirements**

Any person employed by a vector control agency as a Certified Technician or Certified Technician (Limited) shall pass, with a score of 70 percent or higher, the Public Health Pest Control Certified Technician Examination administered by CDPH.

Note by CDPH: The core portion and at least one specialty portion of the Public

Health Pest Control Certified Technician Examination administered by CDPH must be passed to become certified.

**30056 Examination Content**

- (a) The written examination for certification of vector control agency personnel shall consist of questions covering the following areas:
- (1) Label and labeling comprehension – factors including:
    - (A) The general format and terminology of pesticide labels and labeling;
    - (B) The understanding of instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels;
    - (C) Classification of the product, general or restricted; and
    - (D) Necessity for use consistent with the label.
  - (2) Safety – factors including:
    - (A) Pesticide toxicity and hazard to man;
    - (B) Common exposure routes;
    - (C) Common types and causes of pesticide accidents;
    - (D) Precautions necessary to guard against injury to applicators and other individuals in or near treated areas, including medical supervision;
    - (E) Need for and use of protective clothing and equipment;
    - (F) Symptoms of pesticide poisoning;
    - (G) First aid and other procedures to be followed in case of a pesticide accident; and
    - (H) Safe and proper procedures for identification, storage, transport, handling, mixing of pesticides and disposal of pesticides and used pesticide containers, including precautions to prevent access by children.
  - (3) Environment – The potential environmental consequences of the use and misuse of pesticides as may be influenced by such factors as climate and weather, non-target organisms, and drainage patterns.
  - (4) Vectors – factors such as:
    - (A) Knowledge of relevant vectors and their distribution;
    - (B) Recognition of relevant vectors by distinguishing features of the vector organisms and/or characteristics of damage or other signs;
    - (C) Vector development and biology (life cycles) relevant to identification and control;
    - (D) Public health importance of relevant vectors, including a practical knowledge of vector-borne disease transmission, as it

- relates to and influences control programs; and
- (E) Habitats where relevant vectors occur, including a practical knowledge of those environments.
- (5) Pesticides – factors such as:
- (A) Types of pesticides;
  - (B) Types of formulations;
  - (C) Characteristics of pesticides and formulations, including compatibility, synergism, persistence, and animal and plant toxicity;
  - (D) Hazards and residues associated with use, including applicable laws and regulations;
  - (E) Factors which influence effectiveness or lead to such problems as resistance to pesticides; and
  - (F) Dilution procedures.
- (6) Pesticide application equipment and techniques – factors including:
- (A) Types of equipment and their uses, advantages, and limitations;
  - (B) Maintenance of equipment;
  - (C) Calibration of equipment;
  - (D) Operating procedures and techniques used to apply various formulations of pesticides;
  - (E) Knowledge of the most effective equipment and technique of application to use in a given situation;
  - (F) Relationship of discharge and placement of pesticides to proper use, unnecessary use, and misuse; and
  - (G) Prevention of drift and pesticide loss into the environment.
- (7) Non-chemical control methods – A practical knowledge of the importance and use of such methods as sanitation, waste management, drainage, exclusion, trapping, public education, and legal abatement.
- (8) Record Keeping – A familiarity with the principles and practices of biological and operational documentation.
- (9) Supervisory Requirements – A practical knowledge of State and Federal supervisory requirements, including labeling, regarding the application of restricted materials by a technician's aide.
- (10) Laws and Regulations – A basic knowledge of applicable State and Federal laws and regulations.

Note by CDPH: The Core portion and at least one specialty portion of the Public Health Pest Control Certified Technician Examination in Health and Safety Code

Section 106925, administered by CDPH, must be passed to become certified. The Core portion of the examination consists of laws and regulations, pesticides, pesticide use and equipment, labels and labeling, safety and related issues. The Core portion and the Specialty portions of the examination are written, multiple choice format examinations. The Specialty portions of the examination includes relevant vector categories which an employee of a vector control agency may be expected to control when working within a particular certificate specialty. CDPH offers examination in the following Specialty portions as follows:

- (1) Mosquito Biology and Control
- (2) Invertebrates of Public Health Significance Biology and Control
- (3) Vertebrates of Public Health Significance Biology and Control

### **30056.1 Interpretation of Dates**

For purposes of this Article:

- (a) Submission of an application shall be deemed to occur on the date the application form is received by CDPH.
- (b) Filing of a completed application shall be deemed to occur when all information required to be submitted on an application form has been received by CDPH.
- (c) Written notifications by CDPH to applicants shall be deemed to occur on the date the notifications are postmarked.

### **30056.2 Applications**

- (a) To apply for admission to the Public Health Pest Control Certified Technician Examination, the applicant shall complete an Application for Admission to the Public Health Pest Control Certified Technician Examination, FORM DPH 8645 (5/07). The application form shall include the applicant's name and job title, the employing agency's name and address, and the signatures of the applicant and the agency administrator. The form shall be completed, signed, and submitted in accordance with directions printed on or provided with the form.
- (b) Within 14 calendar days after submission of an application for admission to the examination, CDPH shall notify the applicant in writing, through the vector control agency where the applicant is employed, that the application is complete and accepted for filing, or that the application is deficient, and what specific information is required to complete the application. Notification of acceptance shall be in the form of a copy of the application form, marked "approved," which shall be returned to the applicant. If deficient, the entire application shall be returned to the applicant.

Note by CDPH: Exam applicants must be associated with a vector control agency. Exam applications and checks must be POSTMARKED 30 days prior to the exam.

### **30056.3 Admission to Examination**

Admission to an examination shall be permitted upon presentation by the applicant of an approved copy of the application form, as provided pursuant to Section 30056.2(b).

### **30056.4 Notification of Examination Results**

CDPH shall notify the applicant in writing, through the vector control agency where the applicant is employed, of the examination result and decision on the certification, within 118 calendar days after the filing of a completed application.

### **30058 Denial, Suspension, or Revocation**

- (a) The Director may deny, suspend, or revoke any certificate for any of the following reasons:
- (1) Failure to adequately supervise the use of a restricted material.
  - (2) Failure to obtain a restricted material permit when required.
  - (3) Failure to comply with any applicable provision of Divisions 6 or 7 of the Food and Agricultural Code or regulations adopted pursuant to such provisions.
  - (4) Failure to record each restricted material use and submit such record as required by law or regulations.
  - (5) Making any false or fraudulent record.
  - (6) Operating in a faulty, careless, or negligent manner.
  - (7) Failure to qualify by examination.
- (b) Any action to deny, suspend or revoke such certificate shall be heard under the Administrative Procedure Act, Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code; provided, however, if the Director finds that the protection of the public welfare or safety requires immediate action, he or she may, without hearing, temporarily suspend or condition the certificate and shall forthwith schedule the matter for hearing. The Director may terminate such temporary suspension or condition upon corrective action as he or she deems satisfactory to assure compliance with the requirements of the law and the regulations.

## **VI. Article 3 – Continuing Education**

### **30061 Continuing Education Requirements.**

- (a) Holders of one or more certificates are required to obtain Continuing Education Units (CEU) every two-year training cycle. Except as provided in (d), any employee of a vector control agency who independently handles, applies, or supervises the application of any pesticide as part of his or her official duties shall obtain the following continuing education units within each two year period following initial date of certification:
  - (1) Minimum Prerequisite CEU for all specialty certificates:
    - (A) All Technicians must obtain CEU in Pesticide Use and Safety (Category A) – 12 CEU and in their specialty category(s)
    - (B) Technicians certified in Mosquito Biology and Control (Category B) must obtain CEU for both Categories A and B
    - (C) Technicians certified in Invertebrates of Public Health Significance Biology and Control (Category C) must obtain CEU for both Categories A and C
    - (D) Technicians certified in Vertebrates of Public Health Significance Biology and Control (Category D) must obtain CEU for both Categories A and D
  - (2) Additional minimum CEU for each specialty certificate:
    - (A) Mosquito Biology and Control (Category B) – 8 CEU
    - (B) Invertebrates of Public Health Significance Biology and Control (Category C) – 8 CEU
    - (C) Vertebrates of Public Health Significance Biology and Control (Category D) – 8 CEU
- (b) Failure to attain minimum CEU in any specialty area shall result in the down-grading of certification in the specialty in which the Certified Technician is delinquent, to the Certified Technician (Limited) status; however, the Certified Technician has a 6 month grace period to obtain the necessary CEU to maintain his/her certification before he/she is relegated to Limited Status.
- (c) Reinstatement to Certified Technician status shall be subject to the approval of CDPH upon proof of minimum CEU and proof of payment of all current fees.
  - (1) Technicians who have missed an entire Continuing Education (CE) Cycle or more due to, but not limited to, extended medical leave, maternity leave, jury duty or resigned from the vector control industry to pursue interest outside of vector control may retake the Vector

Control Technician Certification Exam in lieu of obtaining CEU for the missed CE Cycle OR may opt to be relegated to Limited Status for the duration of the missed CE Cycle with the intention that they will obtain CEU to regain their Certified Status for subsequent CE Cycles.

- (2) Technicians who have missed a whole CE Cycle or more due to leaving the vector control industry to pursue work outside of the vector control industry and are returning in a supervising vector control capacity may retake the Vector Control Technician Certification Exam in lieu of obtaining CEU for the missed CE Cycle in order to obtain immediate Certified status.
  - (3) Technicians who have missed a whole CE Cycle or more for reasons not explained above must fulfill any deficient CEU for the categories in which they are certified to be reinstated to Certified Technician status.
- (d) The foregoing CE requirements are not applicable to the following:
- (1) Employees who use insignificant amounts of compounds commonly used for pest detection during inspections.
  - (2) Persons who do not handle, apply, or supervise the application of any pesticides for public health purposes.
  - (3) Employees involved only in research and development of public health pesticides.

Note by CDPH: A Certified Technician who passes the vector control technician category A exam and at least one of the other category exams must begin accruing CEU at the start of the new CE Cycle for that category. However, as stated in Health and Safety Code 106925(e), all new technicians shall pay the annual CE renewal fee on or before the first day of the first July following their certification.

## **VII. Continuing Education Curriculum Course Description**

### **PART A – Safe and Effective Use of Pesticides – 12.0 CEU Total**

Including all aspects of pesticide use

***Pesticide Use:*** Description of pesticides (including insecticides, rodenticides, and herbicides), classification, and special uses.

***Pesticide Safety:*** Hazards associated with pesticide use, preventative and protective measures, and special precautions to be observed when handling certain pesticides.

***Pesticide Application:*** Methods of pesticide application, types of application

equipment, application calculations, special application problems.

***Pesticide Equipment Calibration:*** Calibration requirements, importance of calibrating application equipment, methods of calibration, calibration maintenance techniques.

***Toxic Waste Handling and Disposal:*** Classification of toxic wastes, origin of toxic wastes, proper handling techniques, proper methods of transport and appropriate toxic waste disposal procedures.

***Laws and Regulations:*** All laws and regulations pertaining to pesticide use.

## **PART B – Mosquito Biology and Control – 8.0 CEU Total**

Including Mosquitoes

***Biology and Ecology:*** Species diversity, breeding habitat, life cycles, and classification.

***Disease:*** Modes of disease transmission, transmission cycles, zoonotic reservoirs, pathogens, disease description, and impact on humans.

***Control:*** Use of physical control, biological control, chemical control, and public education in integrated control operations. Legal aspects of abatement.

## **PART C – Invertebrates of Public Health Significance Biology and Control – 8.0 CEU Total**

Including Flies, Fleas, Ticks, and Other Invertebrate Vectors

***Biology and Ecology:*** Life cycles, habitats, species diversity, description and classification of several species of terrestrial invertebrate vectors' of public health' significance.

***Disease:*** Prevalence and description of disease organisms transmitted by terrestrial invertebrate vectors.

***Control:*** Latest techniques in physical control, biological control, mechanical control, chemical control, and public education in integrated control operations. Legal aspects of abatement.

## **PART D – Vertebrates of Public Health Significance Biology and Control – 8.0 CEU Total**

Including Rodents and Other Vertebrate Vectors

***Biology and Ecology:*** Habitats, biology, ecology, description, and classification of vertebrate vectors.

***Diseases:*** Disease transmission cycles, disease description, modes of



transmission, and impact on humans.

**Control:** Use of physical control, chemical control, and public education in integrated control operations. Legal aspects of abatement.

### **VIII. Composition and Responsibilities of the Continuing Education Committee**

The President of the Mosquito and Vector Control Association of California (MVCAC) appoints a chairman to the Training & Certification Committee. Each region will appoint a Regional Training Coordinator who is also a member of the Training and Certification Committee. The Committee should also be composed of consultant members representing the University of California and the Vector-Borne Disease Section of CDPH. The Committee will coordinate continuing education programs for California Certified Vector Control Technicians. It will be the Committee's responsibility to create continuing education programs, document training and forward records of finding to CDPH for final approval. Each Regional Training Coordinator will be responsible for planning and executing the training programs within his or her region. Regional Committee members are expected to work closely with the management of all agencies within their region to assure convenient and timely training opportunities. CDPH will assign a program approval number.

Agencies that do not belong to MVCAC will submit their continuing education programs to the CDPH Training and Certification Coordinator for review and approval. CDPH will assign a program approval number that will also be valid for MVCAC agencies.

### **IX. Policy and Procedure for Approval of Continuing Education Programs**

The following are the criteria used to approve programs for continuing education:

1. Program content will be evaluated on the basis of, but not limited to:
  - a. Relevance to vector biology, ecology, disease, and integrated control;
  - b. Qualifications of instructors;
  - c. Expected level of instruction relative to educational level of the technicians.
  
2. All program approval requests must be submitted to the CDPH at least 15 days prior to the date of the program.

3. All program approval requests must include a detailed agenda or program indicating:
  - a. The subjects to be covered.
  - b. A time schedule.
  - c. Names and affiliations of person giving presentations. Persons giving instruction must have recognized expertise in those areas of instruction.
  
4. Webinars (e.g. online programs) may be used as part of a continuing education program.
  - a. During a CE cycle: a maximum 10 CEUs via webinars is allowed for category A; a maximum of 6 CEUs via webinars is allowed for Category B; and a maximum of 7 CEUs is allowed for Categories C and D.
  - b. A maximum of 30 CEUs may be earned through webinars per two-year cycle.
    - i. Live session programs recorded regionally cannot be viewed for CEU unless there are extraordinary circumstances as determined by CDPH (see item 5).
  - c. CE credits for a recorded session will be allowed only once during a continuing education cycle.
  - d. Webinars are only valid for CEU in the CE Cycle in which they were approved.
  - e. Acceptable webinars will be sponsored by CDPH and MVCAC or be sponsored by an approved outside agency, such as AMCA or CDC.
  - f. Only webinars pre-approved by CDPH will be accepted for CEU.
    - i. All fees associated with the webinar are the responsibility of the Technician or employing agency.
  
5. MVCAC sponsored regional programs which are recorded for historical purposes may be used to obtain make-up CEU under special circumstances and are subject to the following guidelines:
  - a. Recorded programs may only be used by Certified Technicians who were unable to attend such programs due to legitimate absence, including but not limited to: serious illness, catastrophic events that prevented travel to the program venue, or death in the certificate holder's family. Under no circumstances shall credit be given for the viewing of a recorded make-up program if it was reasonably possible to attend the original program.
  - b. Requests to view a recorded make-up session must be written and signed by the district manager on behalf of the Technician and sent to CDPH. The request shall include the Certified Technician's name,

- certification number, reason for needing the make-up CEU, and requested plan of action to accrue the deficient CEU.
- c. The Regional CE Training Coordinator must certify that the recorded program is of sufficient quality to be used as a professional continuing education tool.
  - d. Certificate holders will be limited to one recorded make-up program in each two-year continuing education cycle. This does not include the webinars. Exceptions may be made in cases of extreme hardship. Requests shall be made in writing to the CDPH Training and Certification Coordinator, who will consider the request.
6. All regional programs must be advertised and requests must include invitations to at least agencies within the region to attend.
  7. Regularly scheduled professional conferences and meetings, such as the Society of Vector Ecology, the American Mosquito Control Association and MVCAC conference, may qualify for continuing education credit. Each day of multiple day conferences must be individually submitted for CE credit and must receive a unique program approval number for each day. It is the responsibility of the MVCAC Chairman of the Training and Certification Committee to submit these programs for CE units. The CDPH Training and Certification Coordinator will review and submit agendas for non-MVCAC sponsored conferences and meetings.
    - a. For conferences or meetings with concurrent sessions, CEU will be based upon averaged CEU for presentations given in that day.
  8. Entry-level correspondence courses and training designed to prepare Vector Control Technicians for initial certification are not deemed appropriate for continuing education credit.
  9. Lab training units will be accredited at the rate of 3 hours equals 1 CEU.

## **X. Maintenance of Training Records**

All Certified Technicians must sign the sign-in sheets (Appendix A) at an approved CE program to obtain CEU for attending. These sign-in sheets are then sent to MVCAC as directed at the bottom of the sign-in sheet to be entered into the [Certification and Training website](http://ce.calsurv.org/) (<http://ce.calsurv.org/>). CDPH will use the CE logs posted on this website to determine a Certified Technician status at the end of a CE Cycle. It is the responsibility of each individual agency manager to ensure the

courses posted on a Technician's record on the Certification and Training website is current and correct. If there is no sign-in sheet available at an approved CE program the Certified Technician should obtain proof of attendance and contact the CDPH Training and Certification Coordinator to receive credit.

In addition to the attendance logs posted on the Certification and Training website, it is highly recommended each individual agency document the training units accrued by every Certified Technician in their employ as a backup record. These logs should indicate the Technician's name, the vector control agency employing the Technician, assigned certification number, categories the Technician is certified in, the date(s) of certification, the approved continuing education units accrued (listed by curriculum category, A, B, C, and D as appropriate), program number, and the date(s) of each training session. The CDPH "Continuing Education Training Log" form (Appendix B) may be used for this purpose. These logs should be kept on file through at least the subsequent CE cycle.

A "Manager's Verification of Attendance Logs" form will be sent annually to all agency managers in June. Agency managers must verify the Attendance Logs as posted on the [Certification and Training website](http://ce.calsurv.org) (<http://ce.calsurv.org>), complete the form, and return it to CDPH by July 15<sup>th</sup>. Technicians whose name and certification number are not on this form will not have their CEUs verified in the database. Continuing education training cycles end on June 30 of odd-numbered years.

### **MVCAC Continuing Education: Guidelines for Tracking Attendance and Submitting Records**

The MVCAC purchased Gold Card scanners to document vector control technician (VCT) attendance of MVCAC regional CE programs and to facilitate submission of continuing education units (CEUs). As of July 2011, VCT Gold Cards issued by CDPH include a barcode identifying the technician's certification number so that the gold cardholder's attendance can be tracked with a scanner. The use of the scanner is not mandatory but is recommended to increase efficiency in the sign in process, reduce the chance of misplaced sign-in sheets, and provide a digital record of attendance.

This document offers guidelines for use of the scanner in three settings:

- District-level CEU Training Via Webinar
- Regional CEU Live, In-Person Programs
- MVCAC Annual Meeting

### **District-level CEU Training Via Webinar (1-40 people)**

During each two-year training cycle, VCTs are required to attend a minimum number of continuing education programs for each category in which they are certified. A set number of hours can be achieved through webinars. Agencies without an MVCAC-provided scanner who would like to track attendance with a scanner can purchase one at a minimal cost. Using the document “How to Scan Gold Card Certification Numbers” (APPENDIX C), the agency employee responsible for tracking attendance of VCTs can scan directly gold card barcodes of webinar attendees.

1. If the scanner is not immediately available, is not working properly, or if an agency would like to keep signed sign-in sheets as a back-up, a list of VCT gold card barcodes can be printed and signed by webinar attendees. The printed barcodes of the webinar attendees can then be scanned into the attendance spreadsheet at a later time. The process for generating a list of VCT certification number barcodes can be found in APPENDIX D.
2. Once the barcodes of attending VCTs have been scanned into the attendance spreadsheet, a row should be added at the top of the sheet, which includes the Program Number, the Program Title, and the date it was viewed. The document should be saved using the following filename format: Agency Code, Program Number, Attendance – e.g., COVAM1700016Attendance.xlsx.
3. If an agency does not have a scanner, or experiences technical difficulties, signed attendance sheets will still be accepted.
4. Email the saved attendance sheet to [mvccac@mvccac.org](mailto:mvccac@mvccac.org).
5. MVCAC staff will then copy and paste the certification numbers directly into the bulk entry attendance dialog box in the [ce.calsurv.org](http://ce.calsurv.org) website and archive the file.

### **Regional CEU Live, In-Person Programs (50-300 people)**

A set amount of CEUs are required to be live, in-person sessions. Each MVCAC Regional Training Coordinator will plan one or more live programs during a two-year training cycle.

1. Regional program attendance should be tracked using the same process as “District-level CEU Training Via Webinar.”
2. In order to sign in larger numbers of people more quickly, it is recommended

that Regional Training Coordinators assign one registrar, one scanner, and one laptop for every 50 people in attendance, e.g., six registrars for 300 attendees.

3. To ensure that all attendee certification numbers are being recorded accurately, registrars should verify that the number displaying on the spreadsheet is the same number as appears on the gold card. If it is not, the registrar should manually type in the certification number of the attendee and their information from the database should pop-up. Attendees must have their gold card with them or show proof of identity.

### **MVCAC Annual Meeting (300+ people)**

Each year, live, in-person continuing education units are approved for the MVCAC Annual Meeting. Annual Meeting attendees receive CEUs for each day they are signed in.

1. Meeting attendees who want to receive CEU credits will need to line up daily at the MVCAC registration tables to have their cards scanned. Attendees must have their gold card with them or show proof of identity.
2. MVCAC staff will need to be present at the tables for 45 minutes prior to the first talk and for one hour after the talk begins.
3. MVCAC Annual meeting attendance should be tracked using the same process as “District-level CEU Training Via Webinar.”
4. During the Annual Meeting, the same ratio of registrars per number of attendees and certification number verification process by the registrar should be followed as in the “Regional CEU Live, In-Person Programs.”

## **XI. Certification and Training Website**

The [Certification and Training database website](http://ce.calsurv.org) is found at <http://ce.calsurv.org>. This database has three levels of users: User/View Only, Agency Manager, and Coordinator. By default all Vector Control Technicians will have a user ID and will only be able to view his/her own record, including exam scores, CE logs, fees due, and certification status. This site also houses all approved Vector Control CE programs.

Each agency will have at least one person assigned Agency Manager privileges.

This will typically be the manager, but may also be someone who is in charge of the agency's CE logs. Although there may be more than one person with Agency Manager privileges at an agency, the manager must contact the CDPH Training and Certification Coordinator if he or she would like someone else to have these privileges. The Agency Manger privilege allows access to viewing all the agency's technicians' records.

Coordinator privilege is for individuals on the Training and Certification Committee or with the MVCAC office. They will be able to view all districts' records for CE related issues. They will also be allowed to enter new CE programs and add attendance records.

Your default login ID is the first two letters of your first name and your full last name as shown on your Gold Card or certificate, all in lower case, e.g., Joe Smith = josmith. Your password is the same as your login when first entering the website. You may change your password under "Settings". If your login formula is more than 10 letters, use only the first 10 letters, e.g., Shane McThomasmuffin = shmcthomas. If you have an ' in your name do not use it in your login or password, e.g., O'Connor = oconnor. And if you have a name that is shared with someone else in the database you might have to add a 1, 2, 3, etc. If you login under your name and notice that it is not your record, please notify the CDPH Training and Certification Coordinator to obtain your correct login ID and password.

## **XII. Additional Information**

For more detailed information on The Vector Control Certification and Training Program please see information below:

- The Certification and Training Coordinator, CDPH, Vector-Borne Disease Section, Sacramento Headquarters. (916) 552-9730
- [CDPH Vector Control Certification and Training Website:](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Vector-Control-Technician-Certification-Program.aspx)  
<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Vector-Control-Technician-Certification-Program.aspx>
- Chair or Regional Training Coordinator of the MVCAC Training and Certification Committee.
- [Mosquito and Vector Control Association of California website:](http://mvacac.org/)  
<http://mvacac.org/>

APPENDIX A

**Continuing Education Sign In Sheet**

Program Title: \_\_\_\_\_

Program Approval Number: \_\_\_\_\_ Date: \_\_\_\_\_

CEU Approved: \_\_\_\_\_

<b>Name</b>	<b>Certification Number</b>	<b>District</b>	<b>Signature</b>

Email, Mail or fax completed sign in sheets to the [MVCCAC](mailto:mvccac@mvccac.org):  
mvccac@mvccac.org  
One Capitol Mall, Suite 800, Sacramento, CA. 95814-3229.  
Fax 916-444-7462  
Office 916-447-1975 ext. 117



APPENDIX B

**California Department of Public Health  
CONTINUING EDUCATION TRAINING LOG**

**Name:** Joe Mosquito

**Agency:** CDPH, Vector-Borne Disease Section

**Cert #:** 123456789

**Cycle 15 from 2017-07-01 to 2019-06-30**

<b>Course #</b>	<b>Date</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
19-00XXX	2019-XX-XX	1	1	1	1
19-00XXX	2019-XX-XX	2	2	2	2
19-00XXX	2019-XX-XX	3	3	3	3
19-00XXX	2019-XX-XX	4	4	4	4
19-00XXX	2019-XX-XX	3	3	3	3
	TOTAL	13.0	13.0	13.0	13.0
	Unit Requirement	12.0	8.0	8.0	8.0

I certify that the continuing education documented herein accurately reflects the training received by the above named employee. I further certify that at least 50% of the required units were obtained through training given by speakers from other than the employing agency, or through training programs sponsored by other than the employing agency.

---

Agency Manager

Date

## APPENDIX C

### How to Scan Gold Card Certification numbers

*Windows, Mac, and Linux Operating Systems; works with Quickbooks, Word, Excel,*

#### **Software:**

1. *Microsoft Excel*
2. *Attendance.xlsx from <http://ce.calsurv.org>*

#### **Hardware:**

3. *TaoTronics Model: TT-BS016 Barcode Scanner and Novell*






1. Attach the provided cord to scanner unit (See Figure 1).
2. Connect the other end of the cord to a computer USB Port (See Figure 2).
3. Wait momentarily until light on top of the scanner flashes red.
4. Device driver software will begin installing on the computer. An information window will appear in the lower right corner of your computer screen indicating "USB Input Device - Device driver software installed successfully." If unsuccessful, disconnect the device and plug into another USB Port.
5. Open the Microsoft Excel Spreadsheet titled "Attendance.xlsx" and add the District Code and Program Number to the file name, e.g., COVAM1700016Attendance.xlsx and save locally.
6. Place the cursor into cell A2.
7. To scan the Gold Card Barcode, hold the scanner approximately 4" inches from the card.
8. Save the spreadsheet often throughout the scanning process.
9. When finished scanning the gold cards, review the data for completeness.
10. Email the saved spreadsheet to [mvccac@mvccac.org](mailto:mvccac@mvccac.org).

## APPENDIX D

### Appendix B: Gold Card Barcode Generator Instructions

Automatically generate barcode numbers on a spreadsheet of employee gold card certification numbers by following these step-by-step instructions.

1. A Gmail/Google account is necessary to sign in.
2. After signing in to Google, go to:  
<https://docs.google.com/spreadsheets/d/13HsqvdwZcx0mtJWNol9IVImmeyDHLioR4FRdFkLg0b/edit?usp=sharing&newcopy=true>
3. Make a copy of the spreadsheet from the link (Choose File, Make a copy) and create a title for the file when prompted using your agency name.
4. Follow the format of the sheet and paste the employee information for your agency employees below the copied information from the original sheet.
5. Use the “Fill Down” feature to generate barcodes for those employees. Highlight the barcode box from the copied sheet and pull it down over the empty barcode boxes. The barcodes will be automatically filled in.
6. When all the barcodes are generated delete the sample names at the top, keeping only your agency employee names and barcodes (Example below).

	A	B	C	D	E	F	G
1							
2		Fname	Lname	Signature	CERT. #	District	Barcode
3	1	Joe	Smith		70 000 9999	Sac-Yolo MVCD	 700009999
4	2	Jane	Smith		70 000 9998	Sac-Yolo MVCD	 700009998
5		Jill	Oviatt		71 000 2222	CVMVCD	 710002222
6					72 000 9998		 720009998
7					73 000 9998		 730009998
8							