Pesticide Use Enforcement Program Standards

Volume # 5

Investigation Procedures

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Volume 5 – Investigation Procedures Updates
Replacement Page Instructions

May 2019

Updates will be available at:
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Pesticide Use Enforcement Program Standards
Compendium Overview

Mission

The mission of the Department of Pesticide Regulation (DPR) is to protect human health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management.

Role

The role of regulating pesticides in California is a joint responsibility of the Director of DPR and county agricultural commissioners (CACs). Food and Agricultural Code (FAC) section 2281 provides that DPR is responsible for overall statewide enforcement and for issuing instructions and making recommendations to the CACs.

The CACs are responsible for local administration of the pesticide use enforcement program. Several other FAC sections (11501.5, 12977, 12982, 14004.5, and 15201) state that CACs conduct pesticide work under the direction and supervision of the Director.

About the Pesticide Use Enforcement Program Standards Compendium

The *Pesticide Use Enforcement Program Standards Compendium* is a series of seven volumes that contain pesticide use enforcement directives, interpretations, recommendations, and expectations. The Compendium represents the Pesticide Use Enforcement Program's "standard operating procedures."

Contents of the Compendium supersede any position or direction on these subjects contained in previous letters to CACs or earlier manuals. Omitted items not in conflict with directions or positions contained in the Compendium may continue to be used for interim guidance. DPR reserves the right to re-examine omitted topics and may readopt them or develop a new position or direction when necessary.

New and updated procedures, policies, and interpretations will be issued in the form of updates to the Compendium. Suggestions for changes, additions, or deletions to the Compendium should be made to DPR. The Compendium will be the reference against which county programs are evaluated. County performance can impact the mil assessment distribution money it receives.

Please note that the procedures described in this document are intended solely for the guidance of employees of DPR and CACs. They do not constitute rulemaking by DPR. DPR and CACs may deviate from these procedures, provided the deviation does not adversely impact the effectiveness of the county pesticide enforcement program or hinder effectiveness of DPR to fulfill its responsibilities for the overall statewide enforcement program oversight.

Description of Each of the Compendium's Seven Volumes

Volume 1 – **General Administration of the Pesticide Use Enforcement Program**

General authority; Pesticide Regulatory Activities Monthly Report instructions; pesticide use reporting; memorandum of understanding information; county pest control registration; local administration of the Licensing Program with interpretations of law or regulation sections relating primarily to the need for one of the various pest control licenses; and general procedures and expectations not specifically covered in other volumes.

Volume 2 – **Laws and Regulations**

Current text of pesticide-related laws and regulations, including excerpts from Food and Agricultural Code (FAC) laws and Title 3, California Code of Regulations (3 CCR); Business and Professions Code provisions and Title 16 (16 CCR) regulations; Health and Safety Code sections (illness reporting, vector control, etc.); and Labor Code sections (farm labor contractors).

Volume 3 – **Restricted Materials and Permitting**

The California Environmental Quality Act (CEQA) and the permit program's Environmental Impact Report (EIR) functional equivalency; permit issuance process and procedures; DPR "recommended" permit conditions; and permit appeals

Volume 4 – **Inspection Procedures**

Field procedures for pesticide use enforcement inspections and designing a neutral scheme inspection program.

Volume 5 – **Investigation Procedures**

Guidance on planning and conducting pesticide investigations and reporting the findings; preserving evidence; chain of custody; and report writing.

Volume 6 & 7 – **Enforcement Response**

Interpretations of law and regulation provisions relating to the enforcement response regulations; making decisions on violations found during an incident; guidance on how to draft the Notice of Proposed Action (NOPA); conduct administrative civil penalty hearings; adopt final actions; and handling appeals to the Director, statute of limitations; and a glossary.

Volume 8 – **Interpreting Pesticide Laws, Regulations, and Labeling**

DPR interpretations of various sections of law and regulations; guidance on interpreting pesticide labeling, including interpretations of some general and specific labeling statements. It is cross-indexed by subject and section of the law or regulation addressed.

INVESTIGATION PROCEDURES - PESTICIDE EPISODES

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I. GENERAL INFORMATION

A. Legal Authority

Federal Authority. Under title 7, United States Code section 136, et seq., the United States Environmental Protection Agency (US EPA) is responsible for administering and enforcing the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Section 26 of FIFRA specifies that for the purposes of this Act, a state shall have primary enforcement responsibility for pesticide use violations.

State Authority. The purpose of California's pesticide laws and regulations is to ensure proper, safe, and efficient use of pesticides and to protect public health and safety (California Food and Agricultural Code (FAC) § 11501). Sections 11501.5, 12977, 12982, 14004, and 15201 of the FAC authorize DPR and the County Agricultural Commissioners (CAC) under the direction and supervision of DPR to enforce California's pesticide laws and regulations. Section 6140 of title 3 of the California Code of Regulations (3 CCR) authorizes DPR or the CACs to enter, inspect and/or take a sample to determine whether a business complied with California's pesticide law. In addition, 3 CCR section 6141 authorizes DPR or the CACs to interview an employee when investigating an illness or injury suspected of having been caused by a pesticide or a pesticide use violation.

For additional definitions on Federal and State Regulatory Authority, see Compendium Volume 1: General Administration of the Pesticide Use Enforcement Program
www.cdpr.ca.gov/docs/enforce/compend/**vol_1**/index.htm

Regulatory websites:
FAC: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=FAC&division=7.&title=&part=&chapter=&article=
3CCR: https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FAC&tocTitle=+Food+and+Agricultural+Code+-+FAC

B. Responsibility

DPR and the CACs are jointly responsible for investigating potential or actual human illnesses or injuries caused by or suspected to be caused by a pesticide or pesticide use violation (3 CCR § 6141). Pursuant to FAC section 2281, the local CAC usually conducts these investigations. Contact the Enforcement Branch (EB) regional office for assistance in determining the appropriate investigative agency when there are: (1) Incidents involving more than one county; or (2) Conflict of interest issues such as illness of CAC staff or a complaint of county operations.

Upon request, DPR staff will provide guidance to the CAC during an investigation. DPR may also choose to be actively involved in order to evaluate the human health aspects of some incidents. Complete, well-documented investigations form the basis for taking proper enforcement actions and making regulatory decisions. DPR reviews the quality of investigations to evaluate the effectiveness of the compliance monitoring aspect of a CAC's core enforcement program.

DPR relies upon the CAC to provide sound, factual information in the investigative report. DPR uses investigative reports to evaluate pesticide use and illness patterns and to identify broader statewide or national issues. These investigative reports receive close review and scrutiny from the Legislature, US EPA, other government agencies, and the public.

C. Pesticide Episode/Complaint Tracking Log

Pesticide investigation records provide an important source of information, and access to this information is often critical to the support of the program at all levels. DPR assigns, numbers, and tracks all alleged pesticide related incidents that meet Priority Episode investigation criteria and all reported human effects (illness). CACs also conduct, track, and file investigation reports of other kinds (non-priority episodes) of pesticide incidents not tracked by DPR. CACs are to prepare and maintain a log of all pesticide related incidents/complaints. The format for the log is flexible (either a spreadsheet or separate pages) as long as the following information is included:

- Date opened (uncovered or reported)
- Unique identification (number or name)
- Type of Incident (for consistency please use effects categories similar to those used for Priority investigations, use a word or two on cause or identification of property impacted if necessary, such as drift, offsite movement, spill, grapes, water, etc.)
- Pesticide(s) involved
- Location
- Violations (if any)
- Date closed

The need for investigation data by DPR, other agencies, outside organizations, the Legislature, or the media is unpredictable in terms of scope and frequency. DPR and CACs can spend large amounts of time searching individual files in an attempt to determine if investigations were conducted that involve certain pesticides, exposure scenarios, environmental effects, or situations. Enforcement Branch Liaisons (EBLs) have been requested to monitor these logs to check for regional issues that may indicate emerging issues that require DPR action.

D. Pesticide Incidents

Notification of pesticide incidents may be received from any of the following sources: Pesticide Illness Report (PIR); Doctor's First Report of Occupational Injury or Illness (DFROII); Citizen

or Employee Complaint of Human Exposure or Unsafe Condition, either oral or written (form PR-ENF-074); other government agency referrals; notification from pest control businesses (PCB), growers, or labor contractors; Report of Loss, Nonperformance or Damage (form PR-ENF-008); a news media account; or by observation.

For human health incidents, the Health and Safety Code section 105200 (see website: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=105200) requires a physician to report pesticide illnesses to the local health officer within 24 hours. The local health officer must immediately notify the CAC of each reported illness. The CAC should establish contact with the local health department to ensure prompt receipt of these reports. The CAC inform the EBL and the Worker Health and Safety Branch (WH&S) if the CAC receives information related to pesticides and human health effects from sources other than DPR.

DPR routinely forwards incident reports to the CAC for investigation. If the report alleges any type of pesticide illness or exposure, the investigation needs to document and determine the circumstances that most likely caused the human health effects (see section E-1).

Any person alleging property loss, nonperformance or other damage as a result of a pesticide application should file a report of the damage or loss (form PR-ENF-008) with the CAC within 30 days of the occurrence or discovery of the loss (*FAC sections 11761 - 11764*).

E. Jurisdiction

1. Human Health Effects

California law requires physicians to report any known or suspected illness caused by a pesticide exposure. DPR is responsible for collecting human health effects information resulting from all pesticide exposures in **all situations**. Use pattern (such as structural, institutional, industrial, home, or agricultural), or the kind of pesticide (fungicide, antimicrobial, insecticide, or herbicide) does not affect investigative responsibility. However, in certain situations, CAC/DPR does not have jurisdiction and may have to work with other agencies to collect information related to the exposure.

Examples of other agencies' jurisdiction include pesticide manufacturing, formulating and packaging, commercial transportation and storage, emergency response situations such as fires and spills, disposal facilities, etc. These exposures come under the jurisdiction of the Department of Industrial Relations (DIR) as agreed upon in the DIR/DPR/CACASA "Memorandum of Understanding (MOU) For Employee Protection at the Pesticide Workplace." DPR/CAC involvement may be requested due to our general knowledge about pesticide hazards and overall lead agency responsibility for pesticide regulation.

DIR has jurisdiction for exposures involving:

1. Ethylene oxide uses;
2. Inorganic arsenic used as a wood treatment;

3. Formaldehyde in packinghouses and poultry confinement buildings; and
4. Ethylene glycol monomethyl ether uses.

DPR's WH&S forwards reports of illness or injury that appear to be pesticide-related to the CAC for investigation of the circumstances of exposure. Reports involving pesticides that are specifically addressed by the DIR/DPR/CACASA MOU (e.g., inorganic arsenic wood treatments, ethylene oxide and ethylene glycol monomethyl ether) are excluded. **For an incident referred to a CAC and was later determined not to be within DPR/CAC jurisdiction, the CAC must still file a Pesticide Episode Investigation Report (PEIR) with DPR.** The CAC should refer these incidents to the proper agency for potential enforcement.

2. Non-Human Effects Incidents

Illegal Residues: DPR and the CAC hold joint responsibility for investigating pesticide residues on produce. DPR focuses on the produce in the channels of trade while the CAC focuses on how the illegal residue occurred. See page 20 for additional information on illegal residues.

Property Damage or Loss: The CAC is responsible for investigating property damage or loss resulting from the use of a pesticide or pesticide device. If the loss or damage is determined to be the result of contaminated or mislabeled pesticides/pesticide devices or pesticides that contain concentrations of an active ingredient(s) that is not accurately represented by the labeling, the investigation will be conducted by DPR.

Fish and Wildlife Incidents: through an MOU, DPR, CACASA, and the Department of Fish and Wildlife (DFW) outline notification and coordination procedures to fulfill their shared responsibilities relating to the protection of fish and wildlife resources from the potentially adverse effects of pesticides.
www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2001/2001034.pdf

Emergency Hazardous Materials (Pesticides) Incidents: These incidents often involve a multi-agency response. The CAC should contact the lead agency for hazardous materials within the county for direction. Although the CAC may not have any jurisdiction, the county emergency response plan may involve the CAC in assisting other agencies in a coordinated response.

3. Federal Facilities

Presidential Executive Order 12088 requires federal employees performing pest control on federal facilities to comply with federal, state, and local pollution control standards established pursuant to FIFRA. Federal employees must demonstrate applicator certification prior to the purchase and use of restricted use pesticides. Certification may be by the federal agency pursuant to a U.S. EPA approved program. Federal agencies must also comply with requirements on the registered pesticide label.

DPR and CACs cannot assess penalties against federal agencies or their employees for

violations of state or federal law on federal facilities. Executive Order 12088 provides that U.S. EPA is responsible for dispute resolution between a federal facility and a federal, state, or local regulatory agency. The CAC should inform DPR when they find that a federal agency violated a pollution control standard (pesticide law or regulation) and failed to cooperate in the investigation or correct the problem. DPR will work with the CAC and the federal agency to resolve the problem or will forward the information to U.S. EPA for resolution.

However, State laws and regulations (including licensing) do apply to persons who are NOT federal employees and who are hired by or under contract to a federal agency to perform pest control on a federal facility and private persons who lease or contract for the use of federal land or facilities for private activities. DPR and CACs can take action for violations of state laws against these private persons. See Compendium Volume 1 for a more in-depth discussion of authority on federal land and facilities.

4. Tribal Land

While federal and state courts have declined to allow states to assert civil regulatory jurisdiction in a variety of areas, there is no direct case law addressing whether DPR would have jurisdiction to enforce pesticide laws on land recognized by the Bureau of Indian Affairs. For this reason, historically the department has not attempted to enforce pesticide laws with regard to tribal activity. See Compendium Volume 1 for a more in-depth discussion of authority and jurisdiction on tribal land.

5. Cross-Jurisdictional Incidents

When the cause (application) and the effects (exposure, illness, or damage) occur in different jurisdictions (state, country, or tribal land), follow these guidelines during the investigation as each jurisdiction has partial investigative responsibility:

- The jurisdiction suffering the effects is responsible for documenting the extent and seriousness of the effects and transmitting that information to the jurisdiction where the application originated.
- The jurisdiction where the cause originated is responsible for investigating the circumstances of the application to determine if any laws or regulations were violated and for taking appropriate enforcement action.

Communication and cooperation between the two jurisdictions is critical. DPR and US EPA should be involved whenever appropriate. Consult with your EBL whenever there is a cross jurisdictional incident.

7. Incident Complaint about the CAC

If the complaint is about the CAC or CAC employees, contact your EBL prior to investigating the incident to avoid a conflict of interest. For more information, refer to Compendium Volume 8, Section 1.3 at http://www.cdpr.ca.gov/docs/enforce/compend/vol_8/chapter1.pdf

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II. INVESTIGATION OBJECTIVES AND PROCEDURES

In response to a pesticide incident, the County Agricultural Commissioner (CAC) conducts an investigation. The incident can be a human health effect, environmental effect, or an economic loss. An investigation should be initiated as soon as possible.

When it is determined the jurisdiction is of a different county, make sure to transfer it to the appropriate county as soon as possible. It is important not to delay the referral, especially if it involves human health effects, so that the appropriate county can collect reliable time-sensitive information.

A. General Procedures

1. Human Health Effects (General)

a. Objectives

During the investigation of an incident involving human health effects, **t**he primary objective is to **document the exposure and determine the circumstances (including any violations) contributing to the exposure event** in order to evaluate the effectiveness of the label directions, laws, regulations, policies, and practices. It is the role of a medical professional to make an official assessment of health effects. It is, however, permissible for you to correlate symptoms to the pesticide label precautionary statements and/or Safety Data Sheet.

DPR WHS Branch collects human health effects information on all pesticide exposure situations, regardless of enforcement jurisdiction.

b. Assistance

DPR can provide technical assistance to the CAC on pesticide-related **human health effects** incidents. All consultation related to investigations should be coordinated with your Enforcement Branch Liaison (EBL). WH&S staff is available to answer questions dealing with WH&S issues related to the investigation. Although limited, additional assistance is available for:

- Collecting dislodgeable residue samples
- Coordinating the collection of clothing, urine and blood samples
- Assisting CAC investigators in interviewing persons exposed to pesticides
- Physician consultation services
- Create environmental monitoring modeling of offsite movement
- Bilingual staff to assist in interviews

WH&S contracts with the University of California, Davis (UCD) for physician consultation services. The UCD physician is in the office at least two days a month and is on-call during the rest of the month. He is available during business hours to assist CACs and healthcare providers. To obtain assistance from DPR's physician consultant,

contact the WH&S Pesticide Illness Surveillance Program staff (PISP). PISP staff screen the request to determine whether it requires immediate attention, or further research, and will contact the UCD physician when appropriate.

c. Specific Information to Collect

The following information is required (when relevant) in every investigative report:

Specific activity. Identify the exposed person's specific activity (e.g., harvesting grapes, mixing for an aerial application, sanitizing an endoscope) at the time of exposure. For occupational exposures, include information on the length of time the employee spent at this activity and work history. Avoid using “laborer", "farm worker", and other general terms because they do not provide activity-specific information. If specific activity cannot be determined, see Exposure section below.

Toxic agent. Confirm and specify the chemical product(s) involved. Was the chemical a pesticide or used as a pesticide? For dual-purpose products, it is important to establish the intent intended use the product because it may have non-pesticidal purposes (examples: sodium hypochlorite which can be used for home disinfectant vs. whitening laundry or muriatic acid which can be used as an adjuvant for controlling pH balance in pools vs. cleaning masonry stains). Include the evidence for determining the intended use (interview statement, label, standard operating procedure SOP). Record the full product name and the EPA registration number (including the DPR Registration alpha code). Describe how the chemical was used and where (application site) or how it was intended to be used. Was the chemical properly used (i.e., according to label directions)? Was it a restricted material? Was anything different in the pattern of usage (i.e., first time use on a particular crop, different timing or method than in the past)? Accurately record all information.

Labeling. Include a copy of the pertinent pages of the labeling and section 18 directions with the investigation. You may exclude pages that have no bearing on the incident (i.e., use directions for sites other than the one(s) related to the incident). Whenever possible, obtain labeling from the product at the incident site or identify the source (ex: specimen labeling) of the labeling. Take close-up photographs of the labeling when it cannot easily be removed from the container. Request a copy of the registered label from DPR’s Registration Resource Center. Do not include a copy of the Safety Data Sheet (SDS) with the investigation, unless the SDS is presented as evidence of the product used.

Exposure. Describe the exposure event in detail. For example:

- Was there anything unusual about the individual’s activity?
- What were the environmental conditions (hot, cold, rain, fog, windy, dark)?
- Was the individual recently hired or recently assigned to pesticide related activities?
- Was there any potential exposure from prior activities?
- For employees, was there any potential exposure from non-work activities?

- How was the pesticide used, handled, stored, and accessed by the injured party?
    - For situations involving children, how was the pesticide accessible to the child? If the child obtained a dual purpose product stored under a sink or in a cabinet, for what purpose was it used (e.g., to disinfect the bathtub, to sanitize floors, or used as a general cleaner/whitener)

If no specific exposure event can be identified, include a detailed history of activities (at work and home) and possible exposure situations for at least three days prior to the illness.

For occupational cases, try to obtain a copy of an Employee's Report of Injury Form (see link below) if available. The employer's Human Resources Department is a good place to obtain this information. Incidents where the exposure event cannot be determined may suggest that additional mitigation measures are needed. https://www.osha.gov/recordkeeping/RKforms.html.

When possible, include photographs to document the incident. (NOTE: Determining a causal relationship between the pesticide and resulting health effects relies on complete and detailed information on the exposure situation and symptoms experienced. Complete and detailed information increases the accuracy and likelihood of establishing a relationship between pesticide exposure and illness.

Pesticide Application Site History. For incidents involving potential exposure to pesticide residue, provide a pesticide application history (at least 30 days) prior to the date of exposure. It is helpful to include application history for surrounding fields. If no pesticide applications occurred in the previous 30 days, provide the information for the last pesticide application made.

Cultural practices. Note any crop cultural practices that may have contributed to the exposure (e.g., type of trellising, irrigation methods, clean, weedy fields, etc.).

Training.
Handlers: Was the employee properly trained? Did the company have a licensed supervisor? Do the employers' and employee's descriptions of the training program coincide? Evaluate the training as well as the training records. For priority episodes, include a copy of training records only for the employees involved in the incident.

Field Workers: If field workers are involved, did a restricted entry interval (REI) expire within the previous 30 days? If so, have the workers been properly trained? Can the workers explain the type of training they received? Ask the employer how the field workers are trained.

Supervision. Was the employee(s) supervised according to DPR guidance? Was the supervisor aware of the conditions at the use site (3CCR section 6702)? Did the supervisor provide the required personal protective equipment (PPE)? Was the supervisor certified (generally limited to restricted materials)? Was there a plan to

contact a supervisor (or his/her backup)?

Symptoms. Do not assume the information given in the PIR or DFROII (Pesticide Illness Report PIR or the Doctor's First Report of Occupational Illness and Injury) is accurate. Verify the information. Ask the affected person what symptoms he/she experienced. How much time elapsed between exposure and the onset of symptoms? How was the affected person feeling prior to the exposure? When more than one person is involved in an incident, record each individual's symptoms separately. Each person may react differently in similar exposures, depending on their proximity to the application and/or pre-existing medical conditions (examples: allergies, asthma, chemical sensitivities).

Medical care. When there are reasonable grounds to suspect that an employee has a pesticide-related illness, or when an exposure to a pesticide has occurred that might reasonably be expected to lead to an employee's illness, the employer shall ensure that the employee is taken to a physician immediately (3CCR 6726 (c), 3CCR 6766). Confirm that the employee was taken immediately to a physician. When possible, obtain authorization (DPR-ENF-133) from the affected individual to release medical information.

- How much time elapsed between exposure and medical treatment?
- Who took/drove the affected individual to a physician (e.g., employer, co-worker, family member)?
- What treatment was provided to the victim?
- Were medical tests performed? If so, what were the tests and are the results available?

Medical Supervision Program. If medical supervision (3CCR 6728) was required, obtain a copy of the written agreement, and any recommendations from the medical supervisor, in order to determine if the regulatory requirements and physician's recommendations were followed. Confirm that the employer provided a copy of the written agreement to the CAC. Document any tests that were required, but not performed and/or any recommendations that were not followed. For cases involving lowered cholinesterase levels, was the employer required to investigate the employee's work practices pursuant to 3CCR section 6728(d)? If the employer conducted a work practices investigation, include a copy of the report with your investigation.

Medical Records. For all incidents involving human-health effects, whenever possible, obtain the medical records and attach them to the investigative report. Medical records, especially relevant test results, often play a critical role in evaluating an illness. At the time of the interview, it is good practice to take a Medical Information Authorization form (PR-ENF-133 (English) or PR-ENF-133x (Spanish)) for release of medical records and get it signed by the affected person. If you are unable to obtain the medical records, contact WH&S PISP staff (pispillness@cdpr.ca.gov) for assistance. If the records are not attached, document the reason(s) in the investigative report.

For incidents involving cholinesterase-inhibiting pesticides where the physician requested

cholinesterase testing, obtain a copy of the laboratory test results, including the laboratory normal range for each test, and any baseline or prior cholinesterase tests available.

Application method and application equipment. Describe how the pesticide(s) was applied or going to be applied. What type of equipment (be specific) was used? Note items such as air or ground equipment, boom placement on the spray rig, type and effectiveness of closed system used, type of cab on the tractor, air conditioning or filtering system in use on enclosed cabs, type of hand-held application device, use of electrostatic spray equipment, etc. Was the equipment well-maintained and had it been calibrated? What is the size of the nozzle orifice? Evaluation of drift and residue (field and structural) incidents especially benefit from this type of information.

Protective measures. List the protective measures (engineering controls or PPE) provided and used/worn at the time of exposure. What engineering controls and PPE do the product labeling and regulations require? To effectively evaluate the incident and its effect on the regulatory program, WH&S needs to know the specific protective measures used/worn:

- leather vs. cotton gloves
- long vs. short sleeves
- chemical-resistant vs. cloth coveralls vs. work clothing,
- safety glasses (Z87.1) vs. non-compliant eyewear
- dust mask vs. NIOSH approved respirator

Note if PPE was worn incorrectly (e.g., goggles on forehead). For half face respirators, specify whether it is an organic vapor or particulate respirator (such as respirators designated as N95). Statements such as "All required protective clothing was worn" are not useful, unless combined with specific descriptions of the items worn. When possible, note the manufacturer and model of any engineering controls. Is the protective equipment in good repair (clean respirator filters, torn coveralls, holes in the gloves, etc.*)?* The protective measures used section on the PR-ENF-127 form must be completed for all cases. If “Other” is checked, note the item in the designated area (e.g., apron. disposable sleeves and booties, etc.). For non-occupational cases, check “work clothes” if street clothes were worn (such as long/short pants, long sleeved/short sleeved shirts and shoes). If not, check “Other” and specify.

Decontamination. Confirm the following:

- Was there sufficient water for routine washing, emergency eye flushing (production agriculture), soap, single use towels and clean change of coveralls available together at the work site as specified in 3CCR sections 6734 and 6768?
- Were they used?
- Could personal hygiene appear to be a factor in the incident (e.g., employee does not regularly wash hands before eating or was smoking a contributing factor?)?

Others involved. Were other individuals exposed? Did they have symptoms? Which

symptoms did they have specifically? Often, this cannot be determined accurately without interviewing these individuals. Include an interview summary for each individual interviewed. Do not state the affected individual was the only one in the crew to become sick/injured unless the entire crew is interviewed. Lack of a doctor's report (PIR or DFROII) does not mean that no other individuals developed symptoms.

Notification. Describe the method the operator of the property used to give advance notice of a planned application to appropriate people who may enter the field to be treated (*3CCR section 6618*). Remember employees who walk within ¼ mile are presumed to be likely to enter the treated field and, thus, require notification. This includes employees of licensed pest control business and licensed labor contractors hired by the operator of the property.

- Was the notification adequate?
- Did the notice include all required information?
- Did a lack of adequate notice appear to have a role in the incident?

If this incident involves nonproduction agriculture or a non-agriculture setting, did the applicator follow applicable notification requirements outlined in 6618 (b), BPC 8538 and/or 16 CCR 1970.4.

Hazard Communication.

- Did the employer (property operator, pest control business, farm labor contractor) display a copy of an appropriate and completed Pesticide Safety Information Series (PSIS) (A-8, N-8, A-9) (3CCR sections 6723 and 6761)?
- Did the property operator maintain pesticide use records, other applicable PSIS leaflets, and SDSs for pesticides used?
- Did the employer keep employees informed as to where these records are kept?
- Were they granted access to other required records?
- Describe how the production agriculture property operator displays application-specific information (3CCR sections 6723.1 and 6761.1).
- Did the display contain all required information? Was it timely?

Application Specific Information

- Describe how the production agriculture property operator displays application-specific information (3CCR sections 6723.1 and 6761.1).
- Did the display contain all required information? Was it timely?

Generally, failure to meet these requirements would not be a causal factor in an illness incident. However, if it appears that either the failure to display or provide access to such information played a role in the incident, explain this in the investigative report. Regardless of the role this information played in the incident, these requirements should be evaluated during the investigation to determine whether the requirements were met.

d. Worker's Compensation

Worker's Compensation requires medical treatment for all workers made ill at the workplace. Workers are entitled to Worker's Compensation disability income if they become unable to work due to the effects of pesticide exposure in the workplace. If a worker asks about worker's compensation, advise the worker to contact the Information and Assistance Officer of the closest district office of the DIR, Division of Workers' Compensation, for questions about the rights of the employee and worker's compensation coverage/benefits (For addresses and telephone numbers, see Appendix B or website http://www.dir.ca.gov/dwc/IandA.html.)

2. Human Effects Incidents (Specific)

If a CAC independently learns of a human health effect incident through an agency or venue other than DPR, the CAC shall contact DPR's WH&S Branch as soon as possible to ensure the event is recorded, a case number is assigned (if applicable), and the incident is investigated appropriately.

a. Field Worker Cluster Incidents

When investigating any illness/injury involving a member of an agricultural field crew, never assume the worker is the only crewmember affected. DPR may not have additional reports of illness or injury for several reasons:

(1) The doctor's reports may not have made it through the system;
(2) The doctor may not report the incident (even though required); or
(3) The other crewmembers may not have sought medical care.

If more than one illness/injury occurs at one location within a short period of time, be alert to the possibility of a cluster illness/injury situation. Early identification of this situation may actually prevent a serious cluster incident.

A field worker cluster incident may be a challenging situation. At least six issues must be considered:

1. Is there a continuing human health hazard?
2. What is the health status of the affected crew?
3. Is there a possibility of illegal residues on produce?
4. What exposure conditions led to the illness?
    a. Was an Odor reported? (See questionnaire in Appendix E)
5. Were any violations identified?

The health of the exposed individuals is the primary concern. The CAC should involve DPR (WH&S and EB Regional Office) and the County Health Officer early in the

incident. A conference call involving EB Regional Office, WH&S, and possibly the health officer can help the county form a comprehensive investigation plan. The Health Officer has authority (FAC section 12982) to become involved in this type of situation. The Health Officer has the expertise to provide valuable assistance in determining the presence of an ongoing health hazard and in communicating with physicians. Check with your county Health Officer for existing county policies.

When there is the possibility of an ongoing health hazard due to pesticides, the CAC can take the necessary steps to protect workers. Pursuant to 3CCR section 6706, the CAC can issue an order to: (1) prohibit all entry by employees into the area; (2) require the employer to provide medical supervision to the employee; and/or (3) specify exposure time limits or PPE to be worn by employees entering the area.

The medical supervisor monitors the health status of the workers, and the medical supervisor's worker health recommendations must be followed. Inform WH&S of the identity of the medical supervisor.

Conduct individual interviews with <u>each</u> worker soon after the incident. Conduct the interviews privately, without the employer or an employer representative present. DPR recommends that the CAC develop a short questionnaire to use during the interviews. Each questionnaire should take no more than five to ten minutes to administer. The questions should focus on worker specific information (e.g., medical symptoms, including prior history of dermatitis, asthma and allergies if pertinent, work location, and specific activity at time of exposure, PPE worn, personal hygiene, and living conditions).

Collect <u>complete</u> work histories to determine where the crew previously worked. Obtain work history for the two weeks prior to the incident. Work histories include time worked, activity, location of fields worked, crop, variety, crew assignments, etc. Collect pesticide application histories (at least 30-60 days) for all fields noted in the work histories.

People with appropriate expertise (toxicologists, physicians) evaluate these incidents (hazards of residue present, medical tests, etc.). Involve them early in the investigation. Contact WH&S for assistance in this area.

b. Public Exposure Incidents Involving Large Numbers of People

DPR and CACs are responsible for investigating all pesticide exposures. Incidents involving large numbers of exposed people may involve the off-site movement of pesticides or their breakdown products. Even if the affected people do not seek medical attention, an investigation is still required.

Special procedures apply to an investigation for public-exposure incidents possibly caused by the use of a pesticide and where the resulting illness or injury resulted in medical attention, [FAC section 12997.7 outlines these special procedures.] Exposed individuals may be entitled to medical cost reimbursement.

In response to the requirements in FAC 12997.7, DPR developed a set of tools to provide guidance to the CAC in responding to these incidents. These guidelines can be found in Appendix F. The guidelines include two forms designed to assist you in quickly collecting information on all exposed individuals within a household at the same time. These are:

1) Pesticide Exposure Incident Questionnaire; and
2) Pesticide Episode Investigation Non-Occupational Exposure Supplement (PR-ENF-128).

The Pesticide Exposure Incident Questionnaire is designed for the CAC to distribute to individuals within the affected area, to provide the individuals with essential information concerning the incident, and to give affected individuals the opportunity to self-report their exposure situation and associated symptoms. The Pesticide Episode Investigation Non-Occupational Exposure Supplement (PR-ENF-128) is designed to assist the CAC staff in collecting information during interviews. Both forms allow the collection of person-specific information for all members of an affected household (up to 15 people).

c. Incidents Involving Antimicrobial Pesticides

Conduct an investigation to determine the circumstances of antimicrobial pesticide exposure. You must make attempts to interview the affected person and obtain the required information to complete the PEIR. Many antimicrobial pesticides are labeled for other non-pesticidal purposes (whitening, stain removal, etc.). It is essential that you collect the necessary evidence/information (i.e., interviews, cleaning SOPs, intended application site) to determine and indicate the intended use of the product. **Be aware that many antimicrobial pesticides are "DANGER" materials and require the user to wear eye and hand protection**. You should document any violations uncovered during the investigation and the enforcement action proposed or taken. In addition, you should provide 'What You Need to Know About Using Disinfectants, Sanitizers, Medical Sterilants, and Other Antimicrobials in the Workplace.' to the employer, or homeowner, etc. (See website http://www.cdpr.ca.gov/docs/enfcmpli/cmpliast/antimic.pdf for a copy of the leaflet.) DPR regulations refer to Title 8 CCR requirements for antimicrobial handlers [See 3CCR section 6720(c)]. However, the law (FAC section 12973) supersedes regulations and requires compliance with the pesticide labeling requirements.

d. Illnesses Alleged to be Caused by Pesticide Residues on Produce

When receiving public calls about a (raw agricultural commodity) produce-related illness, take the name, address, and telephone number of the person making the complaint. Record the type of produce involved and when and where it was purchased. Also record the date and time of the call.

Inform the caller that these situations are handled jointly by the County Health

Department, the CAC, and DPR. Follow the procedures below when investigating these complaints:

- Forward the complaint information to the County Health Officer. He/she will evaluate the complaint and determine if the illness is possibly pesticide related.

- Samples of produce related to "alleged illnesses" should not be collected or submitted to the California Department of Food and Agriculture (CDFA) laboratory for analysis until the county health department confirms the illness is, at least, "possibly pesticide related".

- If the county health department determines the illness to be possibly pesticide related, your investigation must be initiated immediately. Samples should be collected, if available, of any remaining portions of the suspect produce, or of any of the same lot at the location of purchase. Contact the EBL or the EB regional office for arrangements for sample analysis.

- If the county health department determines that the illness is unlikely to be pesticide related, no further action should be taken by the CAC.

e. Suicide/Attempted Suicide/Self-Harm

When a pesticide is implicated in a suicide or suicide attempt, WH&S will assign it a case number. If the suicide attempt results in hospitalization or death, the event is designated as a Priority investigation. Due to the sensitive nature of these situations, WH&S will request the CAC to follow-up and write a Pesticide Episode Investigation Report (PEIR) <u>only for those cases WH&S identifies as warranting further investigation</u>.

The following are examples of cases where WH&S will specifically ask CACs to investigate with the intent of uncovering information of benefit or importance in DPR's overarching efforts to protect human health and the environment.

- Incidents involving Restricted Materials. You should determine how the person who committed or attempted to commit suicide obtained (with or without a permit?) the Restricted Material.

- Incidents involving an emergency response by a local agency, such as the local police or fire department and/or HazMat, where there may be a reasonable public health concern.

- Other, as determined by WH&S.

When investigating cases of suicides and attempted suicides, you should:

- In the case of an attempted suicide, avoid direct contact or communication with the individual as this might impact his or her mental state. Obtain details and other information from police reports, hospital staff, paramedics and HazMat.

- **Determine the identity and source of the pesticide, the extent of exposure, the signs and symptoms of illness/injury, and possible violations.** If the medical information cannot be obtained, identify the treating physician (name, address, telephone number) and forward to WH&S. If the situation involved emergency response by police, paramedics, or HazMat, obtain reports from the responding agency, if possible. WH&S may be able to obtain more information, if necessary.

If a CAC independently learns of a suicide/suicide attempt through an agency or venue other than DPR, the CAC should contact WH&S as soon as possible.

f. Fatalities

Upon learning of a fatality (non-suicide) involving pesticides, you must obtain as much information about the circumstances as quickly as possible. Information such as the person's activity, potential pesticide(s) involved, exposure scenarios, work history, and incident location are needed for decisions concerning environmental and biological sample collection. Interview the employer, supervisor, and co-workers to obtain this information. Based on this initial information, you may need to collect clothing, PPE, dislodgeable foliar residue (DFR), and tank mix samples, if the local law enforcement officials allow it. See Chapter III for information on sampling and submitting samples for analysis. Prompt sample analysis will provide you with valuable information you can use in further investigating the incident. Contact your EBL or the EB Regional Office before collecting samples to discuss the sampling strategy and to coordinate the sample analysis with WH&S.

Since the county coroner may perform an autopsy within a short period after receiving the body, please notify WH&S promptly with the name and telephone number of the county coroner. WH&S may ask the coroner to collect tissue and fluid samples (such as blood for cholinesterase inhibition or analysis of chemicals, urine for pesticide metabolites, skin wipes, stomach contents, and tissue samples). WH&S will coordinate with the county coroner for sample collection and for the transport and analysis of these samples.

g. Pest Control Equipment Accidents

Investigate pest control equipment accidents (fatal or nonfatal) to determine if a pesticide exposure possibly affected the handler's judgment or abilities. An investigation of a pest control equipment accident should include:

- A work history for the 30 days prior to the accident to evaluate possible pesticide exposure

- A determination of the need for medical supervision
- Copies of relevant medical tests (e.g., cholinesterase baseline and follow-up tests)
- Evaluation of employer supervision
- The most likely cause of the accident based upon the statement of the handler, employer, and any eyewitnesses

For pest control aircraft accidents, obtain, if available, the most likely cause of the incident according to the National Transportation Safety Board (NTSB aircraft accident information can be found at: https://www.ntsb.gov/_layouts/ntsb.aviation/index.aspx). If a fatality occurred, refer to the section on pesticide-related fatalities. Review the priority episode investigation criteria to determine if the incident warrants a designation as a priority episode.

h. Structural Pest Control Incidents

DPR and the CAC are responsible for investigating all pesticide-related complaints resulting from structural pest control applications (FAC 15201, BPC 8615.5). The structural pest control board (SPCB) investigates matters involving licensing or fraud (MOU 98-036). Coordinate with your EBL if you need to request assistance from SPCB during an investigation.

i. Government Agency Sponsored Pest Control Operations Incidents

Inform your EBL when you receive complaints related to government (CDFA, USDA, Vector Control, etc.) pest eradication projects. Investigate these complaints as you do any other pesticide misuse complaints.

3. Employee/Citizen Complaints

a. General Information

DPR and the CACs receive complaints alleging misuse of pesticides, human or animal health effects, environmental damage, or pesticide injury or damage to crops or property. According to DPR's policy and expectations, all complaints are investigated. However, the CAC has discretion to consider availability of resources and other priorities in determining the extent of the investigation and level of effort to invest.

DPR may refer complaints to the responsible agency for investigation. DPR does not normally ask the investigating agency for a follow-up report on routine complaints except for complaint referrals from the US EPA where it has requested a report and complaints received from the DPR Executive Office with an assignment to respond.

DPR refers pesticide use-related complaints to the CAC and does not normally conduct its own investigation except where a possible conflict of interest may be involved. For complaints involving CAC performance, DPR reviews the CAC action and determines

whether the CAC responded in an acceptable manner. If DPR determines the CAC performance is acceptable, DPR informs the complainant of the findings and closes the case. If DPR determines the CAC should have conducted a more in-depth investigation, DPR will discuss the case with the CAC and inform the complainant that DPR requested the CAC to pursue the issue further.

Normally, DPR investigates complaints of pesticide product compliance or pesticide residues on produce in the channels of trade. DPR expects the CACs to conduct a follow-up investigation of residues found on crops grown in their county to determine if the residue was the result of pesticide misuse.

However, WH&S will assign a case number if it is discovered that either: (1) The complainant and/or others allegedly suffered illness symptoms from a pesticide exposure and sought medical attention; or (2) Five or more people reported symptoms, but did not seek medical attention.

b. Citizen Complaints

For citizen complaints of exposure/effects, the individual should complete and sign the Complaint of Human Exposure or Unsafe Condition form (PR-ENF-074). **An investigation must be conducted** regardless of how the complaint was received, even if the complainant does not complete or wish to sign the form. The form serves as the basis for the interview and to record the initial information received. For these types of incidents, determine the following:

- Did the exposed person(s) experience symptoms? Did they seek medical attention? If yes, when and where? Collecting information on the health care provider's name and/or facility name can be useful for follow-up by DPR.
- Did the complainant smell an odor? If yes, how was the odor described? When did it start and is it ongoing?
- Has the hazardous situation been resolved?
- Is pesticide misuse alleged?
- Are there any violations? Attempt to obtain as much information as possible from the complainant at the time of the initial contact (signed statement, medical records release, etc.).

c. Employee Complaints

An employee has a right to a safe workplace (3CCR section 6702). The employer has the responsibility to remove unnecessary hazards from the workplace and to provide protective devices for hazards to which the employee may be exposed.

The employee has the right to file a confidential complaint alleging unsafe work conditions. The employee's legal rights must be protected at all times during the

investigation of a complaint (Labor Code sections 6309 and 6310; website: http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=LAB&division=5.&title=&part=1.&chapter=1.&article=). The name of the complainant must be kept confidential unless that person specifically requests otherwise (Labor Code section 6309).

Employee complaints may be formal or informal. A formal complaint is an oral or written allegation by an employee, union representative, or other employee representative (with or without a contract). If the complaint is a formal complaint, Labor Code section 6309 and the DIR/DPR/CACASA MOU (website: https://www.cdpr.ca.gov/docs/enforce/compend/vol_5/mou_dir_dpr_cacasa_pest_protect.pdf) requires an investigation to begin as soon as possible, but not later than three working days if a serious violation is alleged or 14 days for other complaints. The CAC must inform the complainant of any action taken or the reasons for not taking action. If it is determined that the complaint is not pesticide-related, include the supporting evidence in the investigation report. Employee complaints from other sources (e.g., friends, spouses, or special interest groups) are informal complaints and are not limited by the three working day response; otherwise, they are handled in the same manner as formal complaints. Interviews should be conducted in private without employer representation, and should cover the conditions of the workplace. Do not give advance notice to the employer that an interview or inspection pursuant to an employee complaint is to be made.

For employees filing complaints involving human exposure/effects due to pesticides, use the Complaint of Human Exposure or Unsafe Condition form (PR-ENF-074). The CAC may also receive written complaints on referral from Cal/OSHA as well as by letter from the employee or employee representative.

Conduct the basic investigation of an employee complaint of a hazardous workplace in the same manner as complaints received from other sources. Give special attention to the allegations included in the complaint. Determine the following:

- Is there any evidence to support the allegation?
- Is the hazard ongoing?
- Has the hazard been removed or are protective devices available to control employee exposure?
- Did any violations occur?
- Should other agencies be involved in the investigation (e.g. Cal/OSHA)? If the employee or coworkers reported suffering illness symptoms, recommend they seek medical attention.

Normally, an employee complaint triggers one or more types of inspections using the Field Worker Safety Inspection form (PR-ENF-103), Pesticide Use Monitoring Inspection forms (PR-ENF-104 through 108), or the Pest Control Records Inspection forms (PR-ENF-109 or 110).

The DIR/DPR/CACASA MOU requires DIR to refer complaints of unsafe practices

involving agricultural, as well as nonagricultural use of pesticides to the CAC. The CAC refers complaints of unsafe workplaces involving manufacturing or formulation plants and commercial (i.e., marketing or distribution, not user) storage, transportation or disposal of pesticides or pesticide containers to DIR for investigation. Labor Code section 6313 requires DIR to investigate the causes of any employment accident that results in a fatality or a serious injury, illness or serious exposure. These types of incidents are likely to result in a joint investigation.

d. Employee Complaints of Retaliation

The employee has the right to protection against retaliation by the employer when he/she files a complaint (3CCR Section 6704). If you receive a complaint from an employee regarding any incidents of retaliation (including threats of retaliation), inform the employee that the Department of Industrial Relations, Division of Labor Standards Enforcement (DLSE) handles retaliation cases. See Appendix C or the DSLE web site (http://www.dir.ca.gov/dlse/DistrictOffices.htm) for a list of DSLE district offices. Provide the employee with the telephone number and address of the nearest DLSE office. DPR recommends that you tell the complainant to provide the DLSE representative with your name. This will allow the DIR investigator to contact you.

Information regarding retaliation is CONFIDENTIAL. DO NOT document *any* information regarding retaliation on an inspection report or on any document that will be received by the employer. DO NOT discuss any information regarding retaliation with the employer.

4. Environmental Effects Incidents

Since non-human effects incidents cover a wide range of types, the specific objectives vary. In general, the objectives are to identify continuing hazards or any violations and gather evidence to support a corrective or enforcement action. More specific objectives are listed under each heading.

a. Illegal Residue Detection on Produce or Crop

The CAC responds to illegal residues on produce in the field when notified by the DPR EB regional office or when their own observations or record reviews indicate a crop may contain an illegal residue. Information regarding illegal residue cases initiated by the CAC should be given to the DPR Enforcement regional office as soon as possible. See Compendium Volume 8 on "Guidelines for Interpreting Pesticide Laws and Regulations and labeling: Chapter 1 for commodity seizure or harvest prohibition. Also see FAC and CCR at:
https://www.cdpr.ca.gov/docs/enforce/compend/vol_2/food_ag_codes.htm#division7

The CAC has three areas of responsibility regarding illegal residues:

1) Locate, contain and control suspected crops in the field;
2) Investigate illegal residue incidents to determine if they resulted from violations of pesticide laws or regulations; and
3) Notify DPR if commodities suspected of containing illegal residues have entered the channels of trade. DPR will quarantine any suspected lots.

The grower and source field(s) should be identified quickly. Fields suspected of contamination can be held by DPR if it is within one week of harvest. DPR may delegate this authority to the CAC or may request that the CAC deliver a faxed order issued by DPR. FAC section 12601 allows a field to be held for only 24 hours unless sample analysis shows it to contain an illegal residue. DPR may request that the CAC collect a representative sample of the held field. [See section III (A) (8) (b) (viii), page 49 for commodity sampling directions.]

If the suspect field is found to contain an illegal residue, DPR or the CAC will issue a **Stop Harvest Order** pursuant to FAC section 12673.

If the suspect field is more than one week from harvest DPR will issue (or request the CAC to issue) a pack, ship, and sell letter pursuant to FAC section 12671. A **"Pack, Ship, and Sell"** letter is a compliance action with several purposes. It informs the recipient that he/she is suspected of being in violation of pesticide residue laws. It explains the violation and how it was discovered and it warns the person of the possible consequences of harvesting the suspected field. It is then up to the grower to demonstrate, via private lab sampling, that the crop does not carry an illegal residue prior to harvest or destroy the crop.

If it is determined that a grower is in violation of a pre-harvest interval, no sampling is required. In these cases the field should be held by the CAC using FAC section 12672 until the interval has expired.

Once the contaminated field has been identified and harvest has been stopped, the incident should be investigated in the same manner as other types of incidents. Residue cases are categorized as either over tolerance or no tolerance established (NTE).

Over-tolerances are commonly caused by violation of the pre-harvest interval, use at too high a rate, too frequent use, or other label violations. NTE residues are commonly caused by use of a pesticide not registered for that commodity, drift, spray rig contamination or violation of a plantback restriction. Investigations should include an evaluation of applications made to the suspect field, application equipment work histories, and applications made to adjacent fields.

b. Fish and Wildlife Effects

The Memorandum of Understanding between DPR/CACASA/DFW (see website: https://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2001/2001034.pdf) establishes procedures for coordinating investigations of incidents involving injury or death of non-target fish and wildlife, coordinating laboratory analyses, and coordinating enforcement actions. The Pesticide Wildlife Incident Response Plan Agreement established a formal notification system of pesticide incident monitoring to ensure mutual awareness of injuries or death of non-target fish and wildlife attributable to pesticides.

A fish or wildlife incident investigation (need not be a priority episode) requires immediate notification of DPR (Regional Office) and DFW central dispatch (1-888-334-2258). Appendix D shows the DFW regional office map.

A fish or wildlife investigation requires determination of the circumstances, what and/or who is responsible. Some of the circumstances to consider are:

- What kind of wildlife/fish are involved? How many are affected?
  This area may be more appropriately determined by a DFW Biologist.

- The causative agent or condition.
  The laboratory may be able to help determine the causative agent or condition, but not always. Extremely decomposed biological samples make analysis difficult, if not impossible. Moving water may dilute the pesticide to levels below the limits of detection. In these cases, you must rely on circumstantial evidence. See section III (A) (8) (b) (v), page 48 for water sampling techniques.

- How and when was the pesticide introduced?
  Review the NOIs and pesticide use reports for the subject field and related fields (fields that could have contributed to the contamination). Pesticide releases from temporary flight strips or field drainage can be a cause. A map of the canal or watercourse showing direction of flow and extent of kill may reveal a pattern to the kill. Do not overlook applications of aquatic herbicides; large volumes of decaying vegetation deplete oxygen and cause fish kills, even though the herbicide itself is not toxic to the fish. If there is a wildlife loss, consider whether secondary poisoning may be involved.

For more information on how to investigate fish and wildlife kills, consult DPR's Pesticide Wildlife Incident Response Plan (https://www.cdpr.ca.gov/docs/county/training/pstwld/pestwild.htm).

c. Emergency Hazardous Materials (Pesticides) Incidents

Hazardous materials incidents (i.e., pesticide spill or fire) often involve response from multiple agencies, such as fire, law enforcement, emergency medical services, environmental health, and the State of California Office of Emergency Services.

The County Emergency Response Plan will designate lines of communication. In most cases, the CAC should contact the lead agency designated for that county. This is necessary to avoid confusion and duplication of effort during an emergency situation. Specialized techniques, equipment, and organizational concepts are often required for adequate incident response.

Do not leave a hazardous area unattended under any circumstances! Do not approach a spill or fire site that may involve toxic substances unless thoroughly trained and equipped with adequate protective devices. Any approach, especially to fires, must be from the upwind side. Call the appropriate response agency and your supervisor (or have someone else make these calls) as soon as possible.

Consider two things in securing the site: (1) request unauthorized people to leave and/or keep them away from the area; and (2) preventing the spread of the material insofar as possible. If possible, safely prevent spilled material from entering drainage systems. Liquids may be contained by diking with readily accessible materials.

If there is an injured person needing assistance, use good judgment before approaching the site, as you risk the possibility of contaminating or injuring yourself. This is especially important if you are alone at the site.

If contaminated people are accessible, speed is essential. One person should begin first aid treatment while another, if available, calls for assistance. Take precautions such as wearing necessary PPE to avoid contamination during this process. Decontaminate the victim immediately to stop pesticide exposure. Arrange for, or provide transportation of, the victim to a medical facility as soon as possible. Save the pesticide container and material, if any remains, or get a readable label to identify the chemical for a physician. If the container is contaminated, take a photograph of the label and provide it to the physician.

5. Property Damage or Loss

Many circumstances may result in property damage or loss. The most common incidents include drift of herbicides, contamination of a commodity with unregistered pesticides, poisonings of domestic animals, and bee kills. The complainant may request assistance in securing monetary compensation either directly or through findings that can be used in civil court. Try to collect unbiased information useful in determining if pesticide laws or regulations were violated. Do not allow influence by possible civil action. Investigations are conducted regardless of compensation to the affected party.

If crop reduction or total loss is involved, obtain production history for the field in question or for similar fields. The damage pattern may give clues as to the cause and/or direction of the source. Plan your sampling so it provides useful information. Refer to the **Sample Collection** section (section IIIA) of this manual for direction. For example in drift cases, perform gradient sampling, a series of 5 samples taken at varying distances between the suspected source of the drift and the alleged site of the property damage or loss. If drift occurred, the residue level will generally decrease in proportion to the distance from the application site. Consider local topography, especially when investigating incidents involving fumigants. Always prepare a map showing the affected areas and sampling locations. Photographs may also prove useful, if effects are visible.

If the problem appears to be connected to the efficacy or performance of a pesticide product, gather complete information about the application site (including soil types) and the application. This includes all chemicals (including adjuvants) in the mix, pH of the water, and variety of the plant/animal injured. When possible, obtain samples of the suspected pesticides from the tank or container for laboratory analysis. Contact your DPR EBL when investigating incidents involving pesticide performance.

If the investigation is regarding a potential pesticide-related bee incident, the following questions should be addressed during the investigation, and documented in the PEIR related to the date of the incident. This information is also used by DPR and USEPA to evaluate pollinator protection.

- Was the beekeeper registered in the county?
- Were the location(s) of the bees up to date within the county?
- Did the beekeeper or their designated agent request pesticide application notifications prior to the incident?
- Did the applicator do a “bee check” before performing the application?
- Was the beekeeper or designated agent notified at least 48 hours prior to the application?
- Did the beekeeper fill out a Report of Loss to the CAC for the incident?
- If there is no Report of Loss, CAC should ask how many hives/colonies were impacted and the estimated dollar value of the bees from the beekeeper/designated agent. If the complainant declines to estimate, document the attempt to obtain this information in the report. (The page remarks section of PR-127 can be used to summarize this information.)
- Review of PURs in the surrounding area and document findings of what was applied.
- Photos of “as found” condition of the bees at the site, or why the photos could not be taken.
- If the bee incident occurred in one of the Citrus Bee Protection counties, document whether any of the 3CCR 6656 additional requirements were applicable or not.

6. Drift or Off-Site Movement

a. General Information

Background:

Drift or off-site movement may occur from aerial and other above ground pesticide applications. Recognizing this, California's Legislature established as the legal standard that pesticides be used in a manner that prevents substantial drift to nontarget areas (FAC section 12972).

Even though the 3CCR section 6000 definition of substantial drift includes the phrase "quantity of pesticide," a determination that drift was substantial is NOT dependent on the amount of pesticide that was deposited outside the target area, but, rather, by a determination that the applicator did not use due care. Pesticide drift is substantial if it exceeds what would have occurred if the applicator had used due care. See also Compendium Volume 8 "Guidelines for Interpreting Pesticide Laws, Regulation, and Labeling" for additional information.
https://www.cdpr.ca.gov/docs/enforce/compend/vol_8/pestlaw.htm

Definitions:

Drift: Pesticide movement through the air that is not deposited in the target area at the time of application. Drift does not include the movement of pesticide and associated degradation compounds off the target area **after the application**, such as by translocation, volatilization, flux, evaporation, or other forms of "lift off". Drift also does not include the movement of pesticide dusts or pesticide residues on soil particles that are windblown off the site **after the application**.

Substantial drift: The quantity of pesticide outside of the area treated is greater than that which would have resulted had the applicator used due care.
(3CCR section 6000).

Due Care: The degree of care a prudent and competent person engaged in the same line of business or endeavor would exercise under the same or similar circumstances. When a person does not exercise due care, the person is said to be negligent.

b. Investigation

When the CAC becomes aware of an incident involving pesticide drift, the CAC must promptly investigate the incident. This includes oral or written complaints made anonymously. Some incidents may meet the criteria for initiating a Priority Episode investigation.

The CAC must complete the investigation even if the complaint is withdrawn or the

complainant receives compensation for any alleged damages.

When conducting an investigation involving pesticide drift, the CAC should determine whether the applicator violated FAC section 12972, 12973, 3CCR section 6614, 6600 or other regulations.

If an application results in an exposure of non-target crops, people, or other property, then the investigation will be able to demonstrate that a *reasonable* possibility of drift existed and the applicator violated 3CCR section 6614. However, occasionally there could be a case where an application caused the consequence described in 3CCR section 6614, but the evidence presented by the defense shows the resulting consequence was not a reasonable possibility.

To pursue an enforcement action, see discussion of what is required to prove issues related to substantial drift at a hearing in the upcoming Enforcement Response Compendium volume or, for previous reference, section 7.2 in the hearing officer Roundtable Project.

c. Establishing Due Care

To prove that an applicator failed to use due care in making a pesticide application, the CAC must present sufficient evidence to show that the applicator failed to do what a reasonable applicator would or would not have done under the same or similar circumstances.

To determine whether an applicator used due care, it is essential to determine what the weather and other conditions were at the time of the application, what the conditions were at and near the target area, what decisions were made, and what actions were taken by the applicator. The applicator's actions, or lack of actions, will be the deciding factors in determining whether the applicator used due care under the circumstances that existed at the time of application, and thus, whether the pesticide was or was not used in a manner to prevent substantial drift to non-target areas. This determination may involve referencing published good established practices.

d. Applicator Responsibility to Prevent Adverse Effects

Title 3, CCR section 6614 places responsibility on the applicator *prior* to making a pesticide application to evaluate the surrounding properties and other conditions (e.g., application equipment, meteorological conditions, the property to be treated, etc.) and determine the likelihood of harm or damage in order to decide whether the application should be made. This section also requires that *during* the application, the applicator must continually monitor these conditions to determine if a likelihood of harm or damage has arisen during the application in order to decide if the application must be

discontinued.

Therefore, even though the applicator uses the same care that reasonable applicators would use under the same or similar circumstances to minimize drift to non-target areas, there still will be certain situations where the application cannot be made, or, once started, cannot be continued. These situations involve possibilities that are *reasonable* ones under the circumstances of the particular application, i.e., possibilities of which the applicator *reasonably* should have known.

7. Investigative Plan

Start Promptly

Initiate investigations promptly upon notification of an incident. Do not wait for a physician's report or written complaint. The physician may not file a report even though Health and Safety Code section 105200 requires it. Prompt initiation increases the likelihood of obtaining reliable information and reduces the amount of investigative time needed to locate and interview people directly or indirectly involved in the incident, especially when the incident involves migratory/seasonal workers. Early witness contact improves the factual information obtained for the investigative report.

Formulate Plan

Before starting the investigation, you should formulate a general investigative plan based upon the initial information provided in documents such as the PIR, DFROII, Pesticide Episode Notification Record (PENR), or the complaint referral. **The investigative plan should focus on the circumstances of the incident and any potential violations, as well as the kinds of evidence needed to prove the violations.** In developing the plan, you must consider such things as type of incident, priority status, time elapsed since occurrence, collection of evidence, and resources needed. The investigative plan should briefly:

1. List the potential violations by element.
2. List persons who need to be interviewed (by role, e.g., applicator, supervisor, injured person, bystander, etc.).
3. List the pesticide(s) involved and the registration number(s).
4. List the type and number of samples to be collected.
5. List other evidence necessary to prove particular elements of violations (e.g., Restricted Materials Permit, Notice(s) of Intent (NOI), and Pesticide Use Report(s), training records, diagrams, photographs, etc.).
6. List probable inspection activities (e.g., headquarters inspection).
7. Summarize the findings of fact to date, and planned activities.
8. List of persons who need to be provided with periodic updates.
9. Address agreements with other agencies and legal mandates.

Amend the Plan
As the investigation proceeds, amend the plan as you gather new evidence. An up-to-date plan usually has all of the information necessary to provide preliminary findings of the priority episode investigation to the regional offices within 15 days of notification.

To determine current safety conditions, consider performing appropriate inspections in conjunction with the investigation.

8. Timely Submission of Non-Priority Investigation Reports

For Priority Episode investigations, the US EPA/DPR/CACASA Cooperative Agreement provides the notification and timeline requirements for investigations.

For non-priority illness investigations, DPR requires the CAC to submit the completed PEIR to WH&S within 120 calendar days of WH&S assigning a case number. DPR recognizes that a small number of investigations cannot be completed within the established time frames due to circumstances beyond your control. In these instances, the CAC must notify the EBL on form PR-ENF-097 explaining why the non-priority investigation cannot be completed within 120 days. The CAC must also specify the additional length of time needed to complete the investigation. **The EBL must approve the extension and forward** it **to WH&S**. Criteria for obtaining an extension include:

1. The injured person is unavailable for an extended period, but is expected to be available for an interview at a later date. Specify the approximate date on the form.
2. Samples have been sent to an analytical laboratory that is unable to return the results for an extended period of time. Specify the approximate date on the form.
3. There is a delay in obtaining medical records or coroner reports.

Do not delay the submission of the investigative report because of pending enforcement action. Provide the status and nature of the proposed action in the investigative report and upload it to the California Pesticide Enforcement Action Tracking System (CalPEATS).

WH&S receives medical reports (PIRs and DFROIIs), logs them into computer databases, and sends the report to the appropriate CAC via CalPEATS. Upon receipt of the completed PEIR from the CAC via CalPEATS, WH&S records the received date in the Pesticide Illness Surveillance Program (PISP) database. WH&S sends a monthly printout of incidents assigned to each county. The printout includes all assigned cases for the year, including cases with completed investigative reports. DPR uses these dates to determine the length of time the CAC took to complete the episode investigation. The EBL will use this information when preparing the CAC's evaluation.

If an incident needs to be assigned to a different county, please notify WH&S, so the case can be reassigned in CalPEATS.

DPR reviews the investigative reports for completeness and appropriate enforcement action. DPR will request the CAC provide additional information for any report submitted with inadequate information. The time clock stops upon receipt of the investigative report by DPR. The time clock starts again when DPR returns the investigative report to the CAC for additional information.

B. Priority Episode Investigations

You must consider the priority episode investigation criteria contained in the US EPA/DPR/CACASA Cooperative Agreement for each episode (https://www.cdfa.ca.gov/exec/county/documents/Enforcement_Action_in_the_State_of_California.pdf). When you learn of an episode that **appears** to meet one or more of the effects listed in Figure 2 and where there is a reasonable possibility that it could have resulted from the use or presence of a pesticide, you must promptly report the episode to an EBL or the EB regional office.

For priority episode investigations, the US EPA/DPR/CACASA Cooperative Agreement makes no distinction between use-related and non-use-related episodes. DPR reports all priority episodes to the US EPA irrespective of the agency with lead investigative responsibility. For episodes that fall outside of DPR/CAC jurisdiction, DPR will notify the agency with the lead investigative responsibility. For episodes that occur outside of California with any of the listed effects criteria occurring in California, DPR will refer the episode to US EPA.

DPR's EB assigns a priority episode number and sends a Pesticide Episode Notification Record (PENR) to all agencies with responsibility. The EBL works with the CAC during the investigation to ensure State and US EPA concerns are met. This includes investigating all possible violations and taking appropriate enforcement action. View these episodes as an opportunity to examine the entire regulatory process.

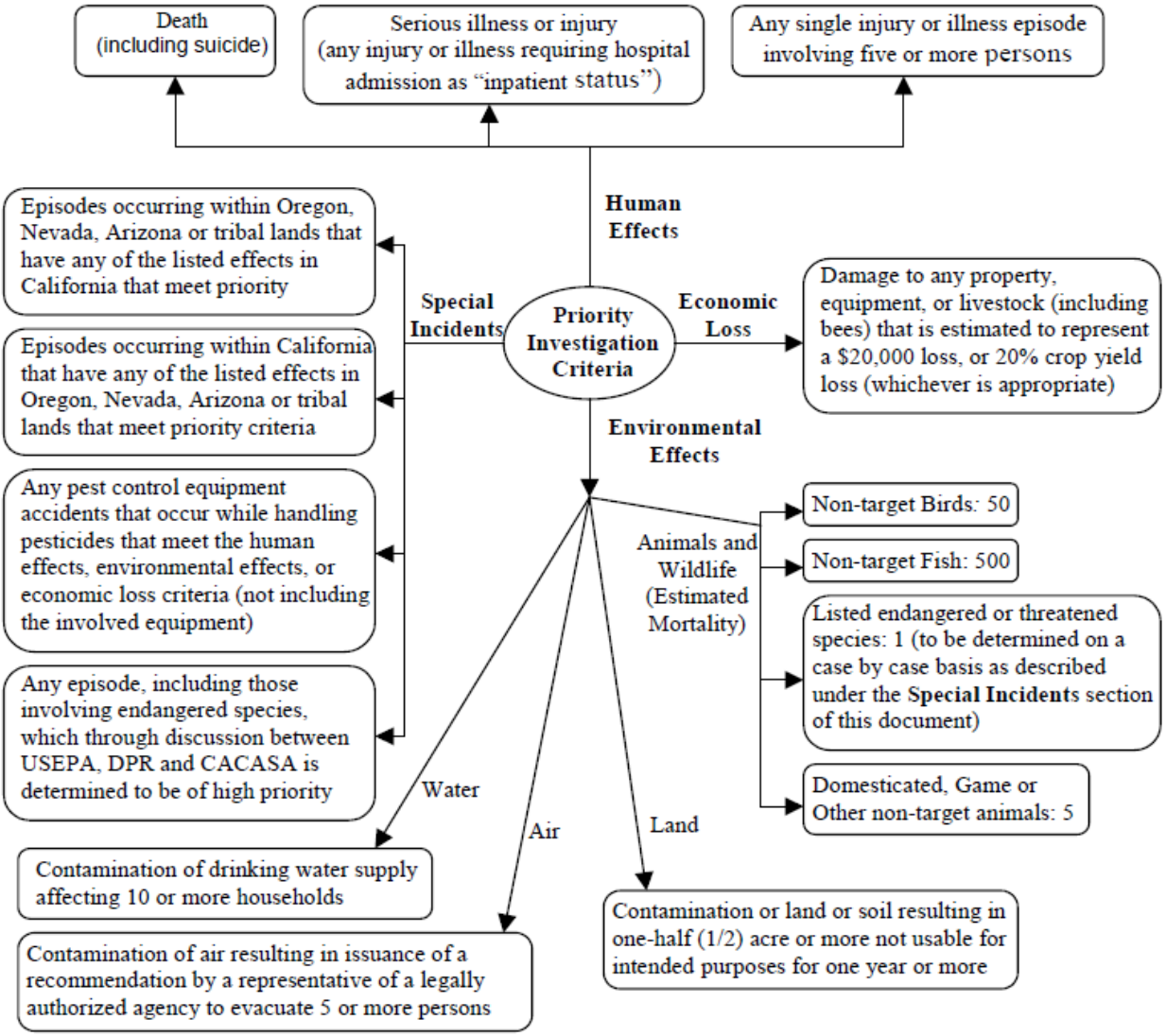
According to the US EPA/DPR/CACASA Cooperative Agreement, a priority episode investigation must commence immediately whenever possible, but no later than 3 working days from referral to the CAC. The CAC will conduct a full investigation of all priority episodes within their jurisdiction. Based on preliminary information from the CAC investigation, the EBL submits an updated report of the priority episode to the DPR EB headquarters office no later than 15 days following the issuance of the PENR. This updated report should include the CAC's initial findings including the activities of people involved (DPR-ENF 115B), suspected violations, projected completion date, and contemplated enforcement actions. In the event that the names and activities are unknown within 15 business days, the CAC should (at the earliest possibility) upload to CalPEATS a list of names and activities of people involved and grant DPR access. The CAC must submit to DPR the completed investigative report within 45 days of completing the investigation. The DPR final report must be submitted to US EPA within 75 days (45 days for the CAC to submit the report to DPR from the date of completion

of the investigation + 30 days for DPR to submit the Closing report to USEPA) of the CAC completing the investigation. If the investigation cannot be completed by the date set by the CAC, the CAC must notify the EBL on Form PR-ENF-097 (Request for Time Extension) explaining why the priority investigation cannot be completed by the set date. The CAC must also specify the length of time needed to complete the investigation.

In the investigative report, you should cover all aspects of the incident (including those not directly contributory). The final CAC report must contain all relevant evidence that might contribute to an evaluation of the cause, effect, and who bears responsibility. During the investigation, examine the activities of all persons involved in making the decision to use a pesticide (including the pest control dealer or agricultural pest control adviser), those who applied it, and, when applicable, those involved in deciding when to send a field crew into the field to perform cultural activities.

Figure 2

Priority Episode Investigation Criteria



<u>Restricted Materials Used During a Priority Episode</u>
(CEQA functional equivalency program effectiveness)

The EBL assigned to the county responsible for each Priority Episode investigation that involves a restricted material is expected to complete a report that responds to each of the issues listed in Appendix G (registration, labeling, permit, NOI, pre-application site evaluation, recommendation, and certification). This report will be forwarded to headquarters via the Regional Office (RO) manager and placed in the investigative file folder for that episode. The CACs are requested to assist the EBL by providing information needed to complete the report.

Due to the nature of events resulting in priority episode investigations, other agencies, including US EPA, commonly review these reports. Often, these episodes attract media, public, and/or legislative attention.

C. Conducting Witness Interviews

The purpose of an interview is to gather information or evidence directly related to the incident. Interviewing individuals associated with a pesticide incident is an integral part of an investigation. The circumstances of the incident dictate the individuals who should be interviewed. For incidents involving drift, structural applications, etc., obtain information from the applicator. If you cannot interview an individual, he/she should state the reason in the incident narrative.

Before beginning your interview, introduce yourself by full name, title and your employer. Tell the interviewee the purpose of the interview. Allow the interviewee to tell his story. Fill in any gaps in the story by asking simple direct questions. Maintain a patient demeanor throughout the interview. Do not use jargon, technical terms, or codes that the interviewee may not understand.

As part of the interview, make sure these five questions are answered:

1. What happened (exposure, drift, odor, etc.)?
2. Where did it happen?
3. When did it happen?
4. Who did it?
5. Why did it happen?

Who should be interviewed: Individuals directly involved in the incident must be interviewed whenever possible. These individuals include the injured individual(s), employer and/or supervisor, applicator, and any eyewitnesses to the incident. In incidents involving two or more ill workers, interview each worker individually. Write an interview summary for each individual interviewed.

Who should be present at the interview: Consider an interview as a private conversation so keep the number of people present to a minimum. Limit the interview to the investigator(s), interviewee, and an interpreter (if needed). For employees, do not conduct the interview in the presence of the employer/supervisor, as this creates the potential for intimidation and/or retaliation against the employee.

Interview Locations: Choose the interview location to afford a private conversation. The location needs to make the interviewee feel comfortable. Government offices, as well as the individual's home, make excellent interview locations. When these locations are not available, choose a less desirable, but still acceptable, location to conduct the interview. Such locations include an employer's office (without the employer present) and outdoor work areas such as agricultural fields. The interviewee

may feel uncomfortable talking to you because of the proximity to the employer and/or supervisor. When interviewing a worker in a field setting, conduct the interview at a suitable distance from the crew and crew foreman to ensure privacy and confidentiality.

Interpreters: When interviewing non-English speaking workers, ensure adequate interpreters are available. Prior planning will establish a network of interpreters who can be contacted and retained on short notice in an emergency.

Using the right interpreter is extremely important. The key is to make the interviewee feel comfortable with the interpreter so he/she provides accurate information pertaining to the incident. Do not use the employer, supervisor, foreman, or other company employees unless specifically requested by the employee. Using such people creates the potential atmosphere for intimidation and threats of reprisal, and can result in the employee providing less or inaccurate information.

Documentation of Interviews in the Investigative Report: Write a separate narrative summary for each individual interviewed. For each interview, state whom you interviewed, who was present at the interview, the date and time the interview took place, where the interview took place, and what the interviewee said.

Contact Log: Keep a contact log for each investigation. Record all attempts to contact individuals involved in the incident and record the results of each attempt. The contact log provides written evidence of your efforts to conduct an investigation and the results of that effort. Attach the contact log, if appropriate, to the investigative report. The log substantiates your effort to conduct a thorough investigation, especially when crucial individuals cannot be located or refuse to cooperate with the investigation.

Interview Questions: To assist investigators, a series of interview questions in English and Spanish can be found in Appendix E for the following types of incidents:

a. Pesticide Handler, Employee
b. Pesticide Handler, Employer
c. Field Worker Exposed to Pesticide (drift, residue, or odor)
d. Private Citizen Exposed to Pesticide Drift or Odor.
e. Private Citizen Exposed to Pesticide Residue

You may develop additional questions, as needed, depending upon the circumstances of the incident.

III. EVIDENCE COLLECTION

A. Sample Collection

1. Purpose and Goals

Investigative samples should be collected to:

- Provide physical evidence of the presence of pesticide(s). Samples may be taken to identify an unknown pesticide in the case of a serious exposure (contact your regional office for approval).
- Assess the nature and degree of exposure.
- Determine if violations of pesticide laws occurred,
- Guide mitigation strategies.

The goal of sampling is to prove or disprove an element of a violation or to establish the cause of a pesticide-related incident. Determine the goal of sampling and the appropriate sampling methods to use to meet that goal. If the goal of the sampling is to prove or disprove an element of a violation or to establish the cause of a pesticide-related incident, you must decide what evidence the samples will provide and make a sampling plan to establish that evidence. The CDFA Laboratory will not accept any shipment of investigative samples without prior approval from DPR. When the CAC decides to collect investigative samples, be prepared to explain how the information will meet DPR's sampling protocol.

2. Formulate an Investigative Sampling Plan

CACs are expected to formulate an investigative sampling plan. Upon request, DPR will provide guidance to the CAC. Samples must accurately represent the problem area to justify the analysis. Remember that showing the presence of a pesticide at the incident site is some of the evidence necessary to prosecute a violation or prove the pesticide caused a pesticide-related effect. The sample evidence should demonstrate how the pesticide got to the incident site and the source of the contamination. Additional sample evidence should also rule out any other possible sources of the contamination. Consider these items when formulating a sampling plan:

- Assess the situation and determine what kinds of samples will achieve your determined goal. The nature of the incident will largely determine the types of samples and method of collection.
- Identify the sample pattern and type of samples to collect.
- Type of sampling equipment required to collect the samples, and the equipment needed to store and ship the samples to a laboratory.
- Number of samples, sample type (foliage, swab, soil etc.) and location of the samples.
- Determine the elapsed time since the pesticide application, as pesticide degradation may limit the value of collecting samples.
- What is the half-life of the pesticide? Some active ingredients are undetectable in

24 hours.
- Has it rained or been irrigated since the application? What was the temperature? Was there wind? Was there an inversion layer?
- Review the Pesticide Use Report (PUR) or pesticide use records for the site.
- Obtain spray history from all adjacent fields.

Good sampling procedures and careful investigative techniques will enable you to report your findings with confidence.

3. Communication Protocol for Investigative Samples

This protocol will help avoid delays, unnecessary sampling, and improve tracking. Consult with your EBL or EB regional office manager before taking samples to obtain approval. Discuss the sampling strategy to be used, and to identify any possible laboratory requirements. If prior contact with the EBL or EB regional office is not possible, follow the protocols in this manual, noting any deviation from the protocol in the report. Include a diagram of the sample sites and discuss the sampling strategy with your EBL. A copy of the **Sample Analysis Reports** (DPR-ENF-030) must be sent to your EBL prior to shipment.

The EBL will consult with the CDFA laboratory staff or with WH&S staff (depending on which lab is performing the analysis) to determine the appropriate sampling, storage, and shipping procedures. This process also alerts the chemists to any special methods or reference standards that may be required. The CDFA Laboratory will not accept any shipment of investigative samples without prior approval from DPR.

Contact your EBL or the regional office manager prior to shipping the samples in order to verify which laboratory will perform the analyses and for tracking purposes. Be prepared to provide the following information:

a) The number and type of samples.
b) The pesticide active ingredient(s) for which analyses are being requested.
c) The circumstances of the investigation such as illness, injury, or damage involved or alleged; any relevant factors; and the enforcement potential.

After receiving approval from your EBL, ship samples to the assigned laboratory (see section III (A) (10) (c), page 60 for shipping direction.

4. Sample Types, Sample Units, and Sampling Patterns

Collect samples as soon as possible in the investigation to provide the most meaningful results. Identify the sample type and sample pattern used, the sampling equipment required to collect the samples, and the equipment needed to store and ship the samples to a laboratory. Remember to consider safety precautions, quality assurance requirements, chain of custody, storage, and preservation requirements for the samples.

a. Sample Types

- Total Residue: Total Residue samples are used to determine the presence of pesticides and the amount detected. The analytical results are expressed as mass of the pesticide/total mass of the sample (ppm).

- Surface or swab: Swab samples are used to detect pesticide contamination or drift onto such surfaces as cars and windows. The analytical results are expressed as mass of the pesticide/sample area (µg/S).

- Dislodgeable Foliage: Dislodgeable foliage samples are collected to determine the amount residual pesticides on foliage surfaces. The samples help determine the potential for exposure of workers through contact with the foliage. The analytical results are expressed in amount per sample (µg/sample) and later converted to mass-to-surface area ratio (µg/cm2) based on the surface area of the known number of leaf punches.

- Volume: Volume samples are used to test for pesticides in air and water. The analytical results are expressed as mass of the pesticide/volume (µg/m^3 or µg/l).

b. Sample Collection Units

There are four different kinds of sample units: single, duplicate, composite, and split.

- Single sample: A single sample provides separate results for an individual sample site.

- Duplicate samples: Duplicate samples are collected under identical conditions, when an affected party requests samples. Collect duplicate samples (two or more) in the same manner as a single or a composite sample from the same site.

- Composite samples: Composite samples are two or more subsamples of equal size that are combined to represent a field or site. Composite samples are taken to determine if a field or site is contaminated, if other samples should be analyzed, and to identify specific chemicals in the sample. Designate the sample as a composite on the *Sample Analysis Report*. The most common reason for taking a composite sample is to obtain fast laboratory analysis.

  Another example of when to collect a composite sample is during an investigation of a reported illegal residue where the source tracked to a group of fields. In this case, take a composite sample from each of the suspected fields by collecting the commodity from each of the corners and from the center of each field. Once the contaminated field is identified and a cease and desist stop harvest order issued, determine the appropriate sample pattern to use in pursuit of a misuse investigation

- Split samples: Created by dividing one sample into two equal and identical portions for the purpose of repeating or verifying tests. Collect twice as much material for a sample that will be split as for a single sample.

c. Sampling Patterns

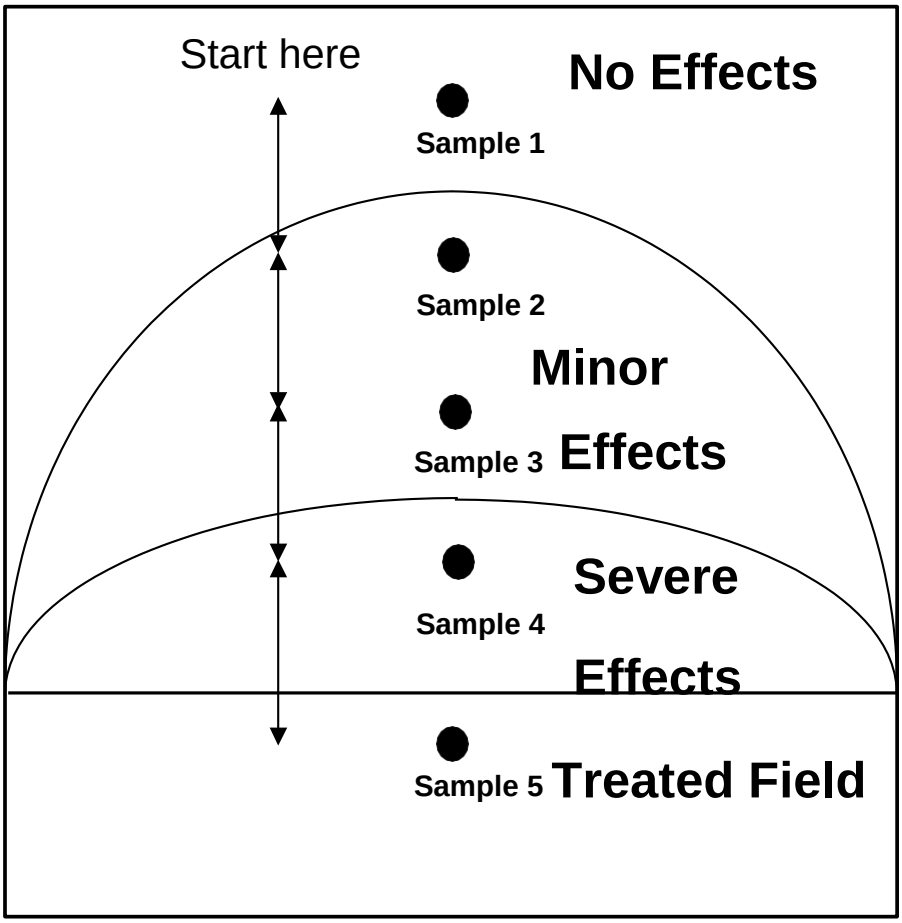
Collect investigative samples in 5-point gradient or 9-point grid patterns. Single point samples are generally inadequate for enforcement purposes and for assessing the nature and degree of exposure. Sampling plans, other than gradient or grid, must be discussed with the EBL prior to collection.

Take precautions to prevent cross contamination. Even walking through an area could contaminate footwear or clothing, so great care should be taken not to sample from areas that have been stepped on or brushed against. When sampling, always sample the area of suspected least contamination and work towards the treatment area. Wash or change tools and gloves between samples collection.

i. Gradient

Gradient samples establish drift of a pesticide. If more than one source of contamination is suspected, collect gradient samples towards each suspected source or use the 9-point grid pattern. Do not use composite samples.

Figure 3



Gradient Sampling Diagram

When circumstances allow, collect five samples in a gradient pattern. Certain sampling situations do not allow for the collection of five samples (for example, a drift into a small residential yard, or lack of sufficient quantity of sample material). In such cases, collect a minimum of three samples: one from outside of the suspected contaminated area, one (or more) from the contaminated area, and one from the suspected source area of contamination. The gradient pattern should be in a straight line. Start collecting samples from the area that is suspected to contain the least amount of contaminant. Number the samples in the order they are taken. Document in your report the basis for any variation from the standard.

ii. Grid

Grid samples establish the distribution of a pesticide residue at the incident site. The sampling pattern should represent the entire field or site. Each point on the grid represents a single sample that should be kept separate from other samples. An incident site may be partially contaminated when an applicator does not substantially

confine a pesticide to the treatment site. (If pesticide drift is suspected from adjacent fields, and the source or sources of contamination are unknown, a grid pattern may be used in place of the gradient pattern. This reduces the number of samples to be taken). If misapplication to part of a field is suspected (tank contamination or partial application), but the treated area is unknown, this type of sampling pattern should be used to isolate the area.

- The sampling grid pattern in the incident site should start approximately 100 feet from the edge of the field, depending on the field size.

- As a rule of thumb, the distance from the edges should represent approximately 10 percent of the width and length of the field or site. For example, a 46-acre site 1,000 feet wide and 2,000 feet long has a starting point 100 feet in from the length and 200 feet in from the width.

- If using the grid pattern to establish drift, collect one additional sample from each of the adjacent fields that are suspected of being the source of contamination.

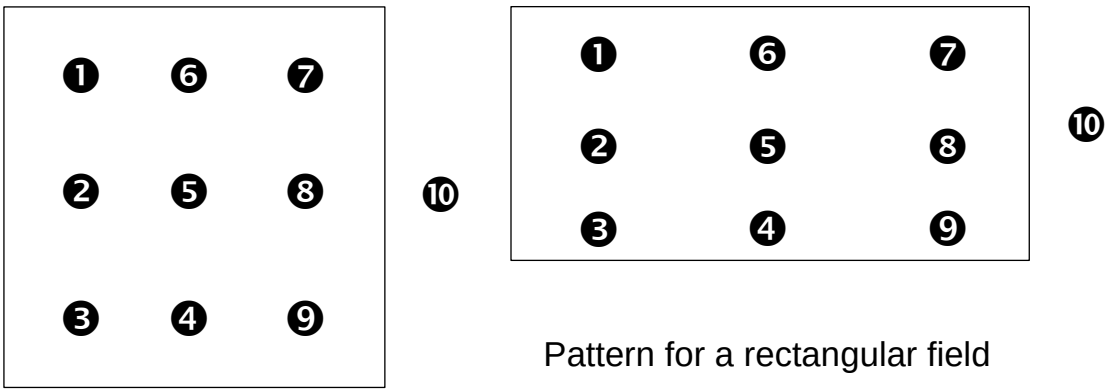
- Samples should be in line with, and at an equal distance apart from, one another in the grid pattern.

- Record the sample locations in your investigative notes and diagram(s).

If the field or site is suspected of being partially contaminated, start collecting samples from the area that is suspected to contain the least amount of contaminant. Number the samples in the order they are taken.

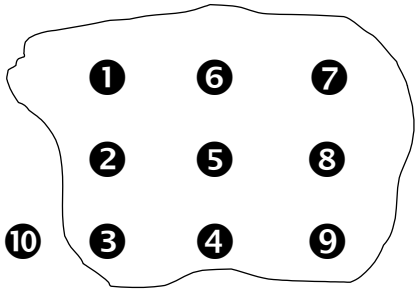
Figure 4

Grid Sampling Patterns

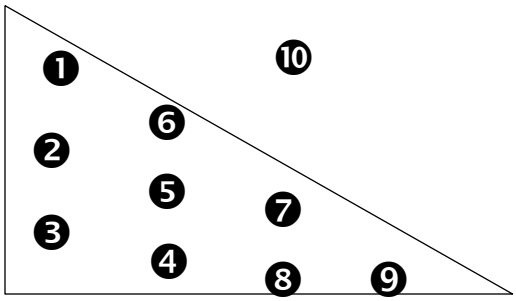


Pattern for a rectangular field

Pattern for a square field



Pattern for an irregular field



Pattern for a triangular field

5. Sampling Equipment

a. Suggested Equipment Checklist

Use this checklist to assemble the necessary sampling equipment.

1. Office supplies and forms
   a. Sample Analysis Report and Sample Analysis Report Custody Record. (PR-ENF-030)
   b. Stapler and staples
   c. Templates (20cm x 25cm) for swab samples - precut from heavy weight paper or card stock
   d. Pens, pencils, permanent markers, note pad
   e. Maps, grower's file, PCO's file
   f. f. Tape
   g. Release of clothing form (DPR-071)

2. Instruments and tools
   a. Shovel, trowel
   b. Soil probe, disposable core tube
   c. Pruning shears
   d. e. Leaf punch
   h. Measuring tape, land measuring wheel
   i. g. Surveyor markers or stakes
   j. Scale
   k. Pole with grasping attachment, ladder, net
   l. Siphon tubes
   m. Camera, film (or digital card), flash attachment, camera accessories, extra batteries

3. Personal Protective Equipment PPE
   a. Gloves - chemical resistant and disposable (shoulder high for water samples)
   b. Coveralls
   c. Respirator (If required per label and authorized and trained to wear)
   d. Goggles and /or ANSI Z87, approved safety glasses (with brow and temple protection).
   e. Hard hat
   f. Rubber boots (waders for water samples)
   g. Soap, water and single use disposable paper towels

4. Containers
   a. Bags - clean, unused paper (double-strength) and plastic of various sizes
   b. Jars - glass, new or clean, various sizes; Teflon® lined lids and/or aluminum foil to seal the lids
   c. Labels
   d. Ice chest

5. Collection supplies
   a. Isopropyl alcohol b. Distilled water
   b. "3-in-1 oil"
   c. Sterile pads, Sharkskin® paper
   d. Blue ice (frozen) or dry ice, as necessary
   e. Paper towels

b. Equipment Maintenance

To decontaminate the equipment (except leaf punches, see directions under section III (A) (7) (b) (i) (b), page 43 under dislodgeable foliage sampling), wash with soap and rinse with distilled water. The equipment should be stored in an office or car, in an uncontaminated location. For smaller equipment, an enclosed, airtight container is recommended. Larger equipment should be decontaminated after each use and prior to sampling. All tools that come into contact with vegetation should be washed, rinsed in distilled water, and rinsed with isopropyl alcohol prior to collecting each sample.

6. Sample Site

a. Evaluate the Site

Along with your review of interview notes and records, evaluate the incident site to provide a better picture of what happened. Get a complete view of the incident site. This will be the basis for the incident site diagram. Determine which pesticides were applied and remember to wear label required PPE if you need to enter the site during the Restricted Entry Interval REI. Do not contaminate yourself by walking through the treated area without the appropriate PPE.

b. Diagrams

It is recommended that you use computer software, electronic resources, or restricted material permits to generate a site diagram. Include the following on the incident diagram: incident site, treatment site, landmarks such as buildings and roads, crops and their acreages, location of witnesses, sample sites and numbers, and the site and direction of photographs. Diagrams should indicate dimensions and orientation. Other useful information is row orientation of the field, wind direction, application pattern and direction. Wind data can be collected from various resources such as the National Weather Service (www.wrh.noaa.gov/map/). **Remember, the person reading your report may not be familiar with the situation. Diagrams and photographs are a great help in understanding local conditions**.

7. Sampling Procedures

a. General Information

Different types of sample analyses (such as soil to grass) are difficult to compare. Similar materials should be used for comparison samples, such as in cases where treated and untreated areas are to be compared. In drift cases, swab samples will yield a cleaner sample than foliage samples.

Before entering a treated area, you should determine which pesticides were applied, whether a restricted entry interval or other reentry restriction is in effect and which PPE should be used. Look for indicators of recent pesticide application(s) to the site and take appropriate steps to prevent contaminating yourself. Fresh tire marks inside the field are a good indicator a vehicle has entered the field

Always wear new disposable gloves, label required PPE, and use uncontaminated tools for each sample. For multiple samples, wear new disposable gloves for each sample, and decontaminate the tools between sampling.

Collect samples in previously unused paper bags or clean glass jars. New jars do not need to be cleaned. Sample material should never come in contact with metal or plastic. Metal lids for glass jars should be lined with aluminum foil or Teflon®.

Collect a minimum of one pound of plant material per laboratory analysis as indicated below in section b. The laboratory maintains a list of active ingredients for their screening analyses.

If samples are underweight, they may not be analyzed, or analyzed for fewer chemicals than requested. (Exceptions: swab and dislodgeable samples). Measure the sample area and record it in your investigative notes.

Samples must be identified immediately after they are taken. Write the identification number on the paper bag or label the glass jar using a permanent marker. Samples in paper bags should be placed in a plastic bag. This should prevent moisture from coming in contact with the paper bag or label and its contents. Sample bags/jars can also be pre-marked prior to entering the sample site for convenience. Chill the samples as soon as possible. Be prepared by taking an ice chest with blue ice or dry ice to the sampling site for this purpose.

b. Sampling Directions

i. Foliage Samples

Foliage samples can be collected in a grid or gradient pattern. Try to collect foliage of similar type such as grasses or broad leaves throughout the sampling area if possible. It will make it easier to extrapolate the data.

a. Whole Leaf Foliage Sampling

- Collect foliage from locations with a specific reference point at the site to identify the residue delineation between the sample areas, and to maintain sampling uniformity.
- Identify the location of each sampling site within the site, because it makes the evidence more credible in an enforcement action.
- Collect at least **one pound** of plant material per sample per analysis or screen. Be sure to collect enough plant material to accommodate the chemistry laboratory if several analyses are requested. The size of the sample area will vary with the location. For example:

Location	**Sample Area**
Field and non-crop	25’ by 25’
Orchards and vineyards	4 trees or vines in a rectangle
Small plants, seedlings, bud-leaf stage or other minimal foliage condition, or for multiple analysis	Sample a sufficient area to produce a 1 pound sample

- Select foliage from all sides of the plant/tree unless drift is suspected. In drift cases, collect the foliage from the side of the plants allegedly exposed to the drift. For most situations, collect the foliage from the outer leaves of the plant/tree.
- For suspected systemic pesticide absorption, it may be necessary to uproot the whole plant. Ask the lab if soil should be removed from the roots.
- **Do not** select foliage in contact with soil.
- New growth may not have been exposed to chemical applications so consider the impact new growth may have on the analytical results.

b. Dislodgeable Foliage Sampling.

Collect dislodgeable foliage samples to determine the potential for human dermal exposure to a pesticide(s). To properly evaluate the extent of exposure, WH&S requires data from dislodgeable foliar residue (DFR) samples, not total residue samples. Due to degradation, prompt collection of DFR samples is necessary.

If your investigation indicates that dislodgeable foliage samples may provide relevant data for determining how the worker(s) was exposed to a pesticide or evidence for an enforcement action, contact your EBL or EB regional office. Your EBL will contact WH&S and assist you in developing a sampling plan and in providing specialized equipment needed to collect dislodgeable foliage samples. WH&S has sampling patterns for row crops, orchards and vineyards. Conduct dislodgeable foliage sampling only on broadleaf trees and plants, not on grasses or other thin or small leafed trees and plants. **Do not collect whole leaves** for dislodgeable residue analysis. Place the DFR samples in an ice chest with ice or blue ice; **do not freeze or use dry ice**.

Samples must be shipped for overnight direct delivery to the laboratory. **Extraction of the samples should take place within 24 hours of collection**.

Dislodgeable foliar residue is reported in amount per sample (µg/sample) and later converted to mass-to-surface area ratio (µg/cm^2) based on the surface area of the known number of leaf punches. Dislodgeable samples are taken with a leaf punch device that deposits measured leaf punches in an attached clean jar. A sample should consist of 40 punches taken with a five-square centimeter punch or 80 punches taken with a 2.5 cm^2 punch, or 160 punches when using a punch size of 1.25 cm^2. Clean the leaf punch equipment between each sample, using water and a paper towel, and then rinse clean with distilled water.

When punching the leaf, make sure the leaf surface covers the entire cylinder punch area. A partial leaf punch will give an inaccurate result because the total leaf area is less than calculated.

Select a site where people were working or were likely to come into contact with foliage, but where there has been no actual contact with people because the pesticide residues may have been dislodged. The punches should be equally divided between the north, south, east, and west sides of the plant to eliminate any effects from differential breakdown. Avoid taking punches from outside rows, as they may not represent the total area being sampled.

Punches should represent all areas of the foliage normally contacted and reachable. This could include the interior as well as the exterior of the plant. **Do not** sample from new growth or leaves contacting the soil unless you suspect they are the source of contamination. If they are the suspected source, be sure to keep soil-contaminated foliage separate from other foliage samples.

When collecting DFR samples, always collect two to four samples from each field or sample site. DFR can be quite variable throughout a field or sample site. Therefore, more than one sample from the site is required to get a good estimate of the residue. Collect the DFR samples from different areas of the sample site, noting the location of each sample on the **Sample Analysis Report**.

For multiple analyses, sampling should be repeated as described above for each analysis or screen requested. Because you cannot sample from the same area, collect duplicate samples adjacent to each other. The locations should always be the same size and of the same material. Use a separate jar for each duplicate sample per analysis and identify with consecutive numbers. The duplicate samples should represent one sample site. Contact your EBL to determine if duplicate samples are necessary.

ii. Surface (Swab) Samples

Conduct surface or swab sampling to determine drift, uniform or partial contamination, or the presence of a pesticide on a surface. Surface samples can be taken indoors or outdoors and in patterns, such as a grid or gradient, or in groups to support other

sample analyses. Surface sampling should not be used to determine whether or not a hazard exists.

At the Office

1. Prepare ahead of time several standard sized (20 cm x 25 cm) disposable templates from manila folders to delimit the area to be sampled. In situations where a template cannot be used, string, pins, or tape can be used for outlining the sample areas.

2. Isopropyl alcohol is typically used as the solvent, however, distilled water may be used when sampling for some water-soluble pesticides such as glyphosate or Paraquat. Do not contaminate the solvent by placing the gauze pad over the mouth of the solvent bottle. While wearing clean or disposable gloves, pour the solvent over the gauze/paper without touching the bottle.

3. **Take a control sample before leaving the office to collect investigative samples.** The purpose of the control sample is to ensure that no pesticide residue is present on collection media. A control sample must always accompany swab samples when sent for analysis. **To avoid any cross contamination, wash your hands prior to using gloves and taking the control sample. Do not obtain the control sample at the sampling site or from an area that contains pesticide residue.**

4. For the control sample, moisten two sterile gauze pads or Sharkskin® sheets as above with the same solvent to be used for the actual sample and place them in a glass jar with a Teflon® or foil-lined lid. Do not wipe or let the gauze pad touch anything before or after collecting the control sample.

At the Sampling Site

1. When selecting a sample site, try to avoid areas known to contain waxes, as these may interfere with the analysis. Smooth "inert" surfaces, such as a windshield, are the preferred area to sample. However, follow the same methods for sampling uneven surfaces such as rugs, furniture, walls, walkways, or counters. Wear a new pair of disposable rubber gloves for each sample collected to avoid cross contamination.
2. Tape the template to the surface area or carefully measure and outline the area to be sampled.
3. Record the surface area and sample location area on the **Sample Analysis Report**, on the incident diagram, and in your investigative notes.
4. Use a new disposable template for each sample area. If string, pins, or tape is used instead of a disposable template, they should be discarded before another use.

For multiple active ingredients, repeat the procedures described above from an adjacent sampling area for each analysis or screen requested. The locations should always be the same size and of the same surface material. Use a separate jar for each sample per analysis or screen and identify with consecutive numbers. These samples represent one

sample site.

1. **Use two sterile gauze pads** or sheets of Sharkskin® paper[2] moistened with a solvent for each surface area sampled. Use gauze pads that are no larger than two inches square. Pre-fold the sharkskin sheets into quarters to establish creases. To prevent contamination of the sharkskin sheets, store two sheets in each of several sealed sandwich bags or within folded aluminum foil in your sampling equipment.
2. Moisten one pad or sheet with solvent as described above.
3. Wipe lightly ***horizontally*** across the measured area with the first pad or sheet, folding the contaminated side, so that a clean surface of the pad or sheet is exposed to make another wipe of the area, and continuing until the whole area has been wiped horizontally.
4. Place that pad/sheet in a glass jar.
5. Moisten the second pad/sheet with solvent and wipe the entire area again ***vertically*** with a clean surface.
6. Place the second pad/sheet in the same jar as the first.

Store the samples in the refrigerator and ship them, including the control, on "blue ice." Refer to the section on shipping procedures.

iii. Clothing Samples

Clothing samples can provide information about the pesticide exposure incident. Be selective when collecting clothing samples. Contact your EBL and WH&S for clothing samples to collect. Generally, clothing samples only tell you that a pesticide exposure occurred and possibly the extent of the exposure, not whether the exposure resulted in a health hazard. Generally, foliage or other samples are collected in conjunction with clothing samples.

When collecting clothing samples, these procedures should be followed:

Inform the people involved that the clothing will not be returned. To show consent, have them sign a **Release of Clothing** form (see form DPR-071 in the Associated Forms section).

Collect clothing only from people who were allegedly contaminated. Consideration must be given to the type of incident involved. Garments, such as shoes, could be collected if an applicator was allegedly exposed to a pesticide because of failure to wear protective equipment. Shirts, scarves, or jackets could be collected if they were exposed to pesticide drift.

- Collect clothing samples away from the incident site.

Collect unwashed clothing that was worn on the day of the incident or all unwashed clothing if they were at the same site for multiple days. Document what is known about the clothing. Contact the DPR Regional Office if unable to collect clothing samples on the day of the incident or requiring special circumstances. When collecting whole articles

of clothing, contact the DPR Regional Office who will coordinate with WH&S.

If the affected area of the clothing is known, you should note that on the **Sample Analysis Report**.

Place each sample in a clean, unused paper bag to prevent cross-contamination, and then put the bagged samples in a properly sealed plastic bag for shipment. Chill the samples on dry ice as they are collected. If the samples cannot be shipped immediately, store the samples in the freezer. See section page 60 for shipping directions.

iv. Soil Samples

Some pesticides are difficult to detect in the soil, and oftentimes other sample types yield more useful information. Contact your EBL regarding the appropriateness of taking soil samples. If soil samples are appropriate, usually one or two soil samples from the most affected area are sufficient, in conjunction with other sample types. Soil samples, however, may be taken in a grid or gradient pattern when other sample types are not possible or appropriate.

a. Surface Soil Sampling

Surface soil samples are best for investigating misapplication of herbicides and soil-applied insecticides and can be used to prove an area was contaminated. For pesticides incorporated or otherwise located below the soil surface, take subsurface samples, as described later.

- Use a clean spatula, trowel, or other tool to scrape the surface soil down to a depth of one-half inch.
- Each sample site should represent approximately a two to four- foot square (i.e., 4 to 16 $ft.^2$ area), depending on the size of the incident site, the concentration of the pesticide residues, and the number of analyses required.
- If the incident site is large, the suspected pesticide concentration is relatively low, or if several pesticide analyses are requested, you may want to enlarge the sample area.
- Collect soil samples from the top half inch of soil and place in a clean, labeled one-quart glass jar sealed with a Teflon® or foil-lined lid. For multiple active ingredients, collect approximately one pound of soil for each analysis or screen requested.
- Measure the sample area and depth and record it on the Sample Analysis Report.
- Fill out a Chain of Custody for each sample.
- Chill the sample(s) and ship on blue ice.

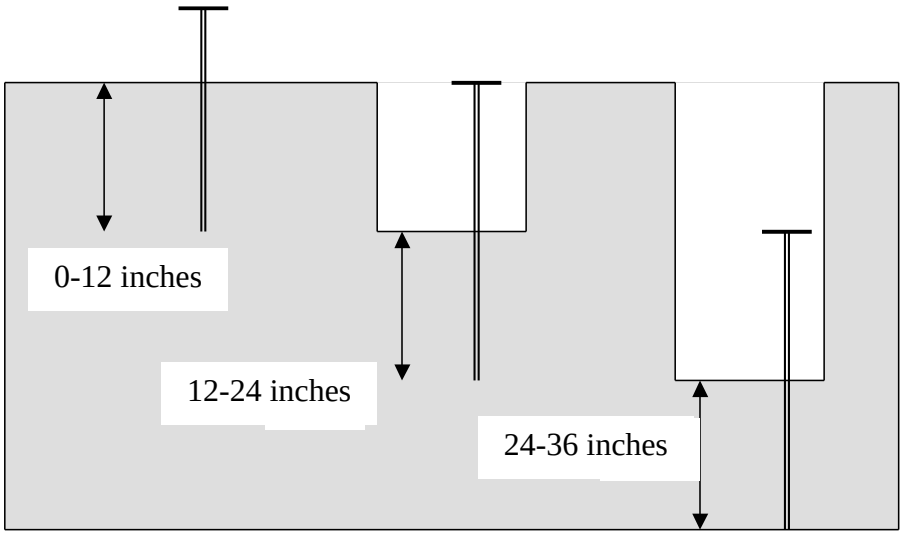
b. Soil Samples at a Known Depth

Collect soil samples at a known depth when it is suspected that the pesticide was incorporated, band or rod treated, shanked, trenched, or moved below the soil surface by leaching or rain. If the samples are not collected at the proper depth, the sample analyses will be misleading. This type of sampling will generally be collected in a grid

pattern within a field or site. Based on your knowledge of the application method, determine the appropriate depth to sample. For example, the sampling depth could be 0"-3", 3"-6", or 6"-12". Measure the sample area, and record it on the **Sample Analysis Report**. Record the measurements of the sample area in your investigative notes.

- Select an individual sample location and measure an area of approximately one-square foot. The sample area can be changed depending on the specifics of the investigation.
- Prior to collecting the soil sample, use a spatula, trowel, or shovel, to remove the soil to the beginning depth you wish to sample. A soil probe (e.g., tube or auger), may be used in lieu of a spatula, trowel or shovel. Take several core samples to the desired depth using the probe or auger after reaching the desired depth. Contact your EBL if you need assistance or soil sampling equipment. NOTE: It is not recommended to use the probe when a band or side dress treatment was made, as it is difficult to determine where the band treatment is located, and could lead to misleading results.
- From that point, use clean or decontaminated sampling equipment to collect one pound of soil and place in a clean, labeled, one-quart glass jar sealed with a Teflon® or foil-lined lid. For multiple active ingredients, collect approximately one pound of soil for each analysis or screen requested
- Collect approximately one pound of soil per analysis or screen from the sample area.
- Fill out a Chain of Custody for each sample. Chill samples and ship on blue ice.

Figure 5



Sampling Various Depths Using A Soil Sampling Tube

c. Soil Sampling (Known Depth, Furrowed Field)

Chemicals may have been applied in bands or side dressed in furrowed fields. In order to sample from the appropriate area, use a shovel to cut across sections perpendicular to the direction of furrow at each sample site. For single rows, start at the center of the furrow and sample across the bed to the center of the opposite furrow. For double row beds, sample from the center of the furrow to the center of the bed.

Collect soil from an area 3 to 6 inches wide, and 12 to 14 inches deep (or less if the application depth is known to be less), as measured from the top of the bed. Place the soil in a stainless steel bucket and mix thoroughly. Collect approximately one pound of soil per analysis or screen from the mixed soil and place in a clean, labeled, one-quart glass jar sealed with a Teflon® or foil-lined lid. Clean the bucket with soapy water, rinse with distilled water, and give a final rinse with isopropyl alcohol. Fill out a Chain of Custody for each sample. Chill samples and ship on blue ice.

v. Water Samples

For collecting samples of surface water, use the following guidelines, which are designed to detect pesticide residues resulting from the misapplication of a pesticide to surface water. If you suspect pesticide contamination of ground water, contact your supervisor and EBL to determine the appropriate local, State, or federal agency for follow-up.

Wear shoulder-length gloves and clean chest-high waders whenever contact is made with potentially contaminated water. Use clean, one-gallon amber glass containers with an aluminum foil or Teflon® seal under lid. Rinse the bottles with the water (native rinse) that will be used to collect the sample. Fill bottles to the top, leaving no air space for pesticides to volatilize. Sample as close as possible to the apparent source of contamination. Avoid areas where water has been isolated from the main body of the stream, lake, or pond. In a flowing water body, sample facing upstream.

Wade out as far as possible into the body of water. Avoid sampling water that is disturbed by your movement. If the suspected pesticide is water soluble, then draw the sample from any depth below 18 inches. If the pesticide is oil-based, or if oil is a part of the tank mix and the alleged misapplication was made across the surface, then draw the sample from the surface layer. For samples below the surface of the water, lower the glass bottle to the desired depth before removing the cap. Allow the bottle to fill, replace the foil-lined cap, and lift the bottle out of the water. For surface samples, remove the cap and dip the bottle into the water surface. Allow it to fill completely and then put on the foil-lined cap. Take several samples distributed around ponds or lakes instead of only one sample. If only one sample is taken, draw several sub-samples from different locations around the body of water and combine in a clean, one-gallon container. If the water is too shallow to immerse a jar, use another clean jar to fill the sample jar.

Refrigerate or place the sample on blue ice immediately. In some cases, other

chemicals may be added to the water to aid in preserving the sample. Contact your EBL for instructions. Document the additives (i.e., preservatives) on the **Sample Analysis Report**.

vi. Sediment Samples

Pesticide residues can accumulate in the bottom sediment of lakes and streams, but generally sediment samples are of limited value and other sampling types are preferred. Check with your EBL prior to taking sediment samples to determine the appropriateness and to obtain additional equipment or assistance, if needed.

Wear shoulder-length gloves and clean chest-high waders whenever contact is made with potentially contaminated water or soil. In shallow water (< 2 feet), gently scoop the top 3 cm of sediment into a clean one-pint, wide-mouth clear glass jar using a trowel.

As equipment is lowered or retrieved through water exceeding a few feet in depth, sediment contents can be flushed or diluted. Disruption may cause mixing of surface layers with lower layers in the sample, and may lead to dilution or concentration of the contaminants of concern. Therefore, a disposable tube is recommended for unconsolidated sediment. DPR's Environmental Monitoring Branch can provide disposable tubes (36 inches long by 2 inches in diameter Teflon® clear cylindrical tube). For firm bottom deposits, a commercial sediment-collection device is recommended; however, these devices often require extensive cleaning between sampling to prevent cross-contamination. Sample with the flow for shallow, flowing streams.

Carefully lower the disposable core tube, or other sampling device through the water and into the sediment. Minimize rolling the sediment. Retain the top 3 cm from each core and take care to minimize disturbance of the top sediment layer during the sampling process. Remove rocks, leaves, and other debris from the sediment before transferring it to a wide-mouth glass jar. Repeat this process several times within the same general area until one pint (or one pound) of sediment is collected. Seal the jar with an aluminum foil or Teflon® seal under lid; chill the sample and ship on blue ice.

vii. Honeybee, Animal, Bird and Fish Samples

Collect samples of dead honeybees, animals, birds, and fish immediately, before decomposition, if possible.

If wildlife is involved, prior to collecting dead animals, contact the local Department of Fish and Wildlife (DFW) warden and your EBL. The DFW can collect the wildlife samples in accordance with the Pesticide/Wildlife Incident Response Plan (manual) at: https://www.cdpr.ca.gov/docs/county/training/pstwld/pestwild.htm. Use disposable gloves when handling animal samples because of the possibility of disease transmission. Small animals and fish (whole) are to be placed in plastic bags. Samples should be chilled immediately to prevent degradation. If any decomposition is

evident, it will be noted on the Sample Analysis Report. These should be frozen and shipped as quickly as possible.

Prior to collecting dead honey bees, the EBL or DPR RO Manager must be consulted to discuss the circumstances of the incident, devise a sampling plan, and obtain permission to have samples analyzed by the CDFA Laboratory. Collect a minimum of **100 grams (about ¼ lb.)** of dead bees for the multi residue screen or the specific active ingredient(s) analysis. Immediately chill samples and ship them to the lab as soon as possible. If it is necessary to freeze the samples, ensure they are maintained in a frozen state to the lab.

viii. Commodity Samples

Collect crop/commodity samples to determine if pesticide residues are in excess of the EPA food tolerance. This information is sometimes used to prohibit the harvest of a field, or seize a packed commodity. The EBL or the DPR Regional Office manager shall be consulted prior to collecting produce crop/commodity samples for analysis by the CDFA Laboratory.

Be careful to select individual fruits and vegetables that are without decay. If the commodity is not cut, refrigerate the sample using blue ice before shipping. Avoid freezing because of problems dealing with thawed and partially thawed commodities and estimating the water mass in the samples. If the commodity is cut, freezing may be necessary to preserve the sample during a lengthy storage period.

a. Field Sampling

Collect field samples that are representative of the whole commodity. Do not remove wrapper leaves, hulls, shells, pods, etc. Do not wash or clean the commodity.

If the entire field is suspected of carrying pesticide residues in excess of the tolerance, collect samples in a grid pattern in the same manner as foliage samples.

Collect at least one pound of commodity per sample, per analysis, or screen. Place the sample in a clean, unused double-strength paper bag.

b. Packed Sampling

If pesticide contamination of a packed or processed commodity is suspected, contact your EBL because DPR is the lead agency for illegal residues on produce in the channels of trade. However, there are some basic points to consider when collecting this kind of sample.

Samples collected at packing sheds should be representative of the produce as shipped in the channels of trade.

Sample size is determined by the number of containers in the lot. Use the following table as a guideline for determining a "representative" sample size:

Total Number of Containers in the Lot, "N"	Number of Containers to Sample From
1 - 5	All
6 or more	(✓N) + 1
10	✓10 + 1 = 5
20	✓20 + 1 = 6
50	✓50 + 1 = 9
100	✓100 + 1 = 11
200	✓200 + 1 = 16

Generally, packed samples are analyzed by the laboratory using a multiscreen. To obtain a representative sample and enable the laboratory to conduct a multiscreen analysis, the minimum sample size should be two pounds.

Do not strip outer leaves before sampling commodity from bulk lots at a packing shed, unless removal of the outer leaves is the practice at the packing shed prior to shipping. Place the sample in a clean, unused double-strength paper bag.

ix. Tank Mix Samples

<u>Prior to taking a sample</u>

Check with your supervisor and follow your department's policies (e.g., Illness Injury Prevention Program) before taking any tank mix samples. If any other samples are to be collected at the site, collect the tank mix sample last, after all other work has been completed. Whenever possible, ask the trained handler to collect the tank mix sample in your presence following the sampling procedures outlined in this manual.

Refer to the pesticide labels for precautionary statements and Personal Protective Equipment (PPE) requirements. If the tank mix ingredients are unknown, assume they are highly toxic and take appropriate precautionary steps to ensure your safety. Be careful when working around machinery and at busy mixing/loading sites. Be aware of hoses and fittings that may be under pressure, or show signs of leakage.

The Formulations Laboratory analysis of tank mix samples,

- Identifies only the active ingredient and any possible contaminants in the tank

mixture but not the inert materials.
- Cannot be analyzed for biological pesticides, such as Bacillus Thuringiensis, and petroleum distillates.

Collecting a sample

Ask the applicator or mix/loader for the best location to collect the tank mix sample.

If the solution is adequately mixed, collect a sample from the drain system,
- Use a catch basin to avoid spills onto the soil,
- Samples can sometimes be taken from a drain near the spray nozzles,
- Drain the pesticide mix into a glass sample jar.

If the tank mix cannot be agitated,
- Use a siphon tube and syringe to collect a composite sample from three depths: near the tank bottom, middle of the liquid level, and near the top of the liquid level.

Do not allow tank mix solutions to contact rubber or plastic, as these materials may affect the analytical results. If the pesticide reacts with metal, use glass jars capped with Teflon® lids, not foil-lined lids. Do not fill the jar above the bottom of the thread line to avoid spills when the sample is opened. Any contamination of the sample container should be rinsed off onto the application site. After collecting the samples, wash your hands thoroughly with soap and water.

Include a copy of the pesticide label with the sample. If the label cannot be obtained, include the ingredient statement and other pertinent label information on the **Sample Analysis Report**. The Sample Analysis Report should also include dilution and mixing directions. Write **"Formulations Laboratory only"** on the Sample Analysis Report.

Chill all tank mix samples to prevent degradation. An ice chest with blue ice will maintain the samples below 40°F. Placing each tank mix sample inside an empty container (e.g. empty paint can) will provide added protection while shipping. Tank mix sample are considered hazardous materials and the shipping company (UPS or FEDEX) must be certified as a hazardous material shipper. Therefore, Department of Transportation (DOT) regulations must be followed. Ship by the fastest means available, taking into consideration Department of Transportation (DOT) regulations. To avoid cross-contamination, **do not** store or ship tank mix samples with or near other sample types (foliage, soil, etc.).

8. Outsourced Sampling Techniques

a. Air Samples

Due to the knowledge and experience needed to operate air sampling equipment, contact your EBL for assistance in contacting an environmental or occupational health agency or DPR's

Environmental Monitoring staff to conduct the sampling.

Two types of air samplers are used. High Volume samplers for measuring low concentrations of pesticides over long periods of time; and Low Volume samplers for measuring higher concentrations of pesticides over shorter periods of time. Either high or low volume samplers can be used indoors or outdoors.

1. Indoor Air Sampling: Hi-Vol samplers must be vented out of the dwelling to ensure that air will not be recycled through the machine. Rooms with cigarette smoke or gas appliances must be avoided; any gases or suspended smoke particles in the area will contaminate the sample.

2. Outdoor Air Sampling: Position sampling equipment to avoid exposure to engine exhausts, running motors, cigarette smoke, or any other nontarget air contaminants. Protect sampling equipment from rain and direct sprays from application machinery. Use shelter hoods to protect the equipment in such situations.

b. Feed, Milk & Dairy Foods and Egg Samples

For suspected pesticide contamination of a feed, milk or dairy product, or egg commodity, contact your EBL to determine which appropriate State or federal agency to contact for follow-up. If samples are requested by an external agency, use the sampling protocol of the **United States Food and Drug Administration's Investigations Operations Manual** (see website https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/inspection-references/investigations-operations-manual) for proper sample collection of these commodities for compliance (investigational) purposes.

c. Pesticide Formulation Samples

Sampling pesticide formulations for investigative purposes is sometimes necessary to provide evidence of pesticide misuse, misformulation, product composition, cross-contamination, or other problem. In order for the analytical results of these samples to substantiate a finding that a violation exists, the samples must be representative of the total amount of the material sampled. Discuss with your EBL the appropriate protocol to use for the particular situation prior to taking formulation samples. Typically, DPR staff takes these types of samples.

9. Sample Preservation, Storage, and Shipping

The proper collection, storage, and shipping of samples are critical elements of the sampling process and can affect the analytical results. Take the necessary steps early in the sampling process to avoid anything that could compromise the integrity of the sample, such as loss, deterioration, contamination, or tampering. Any mishandling of the sample can have a negative impact on the admissibility of the sample as evidence. Ideally, a laboratory should analyze the samples as soon as possible after they are collected. However, in many situations, this may not be possible and consideration

must then be given to assure the integrity of the sample by utilizing proper storage, preservation, and shipping methods.

a. Storage

Ensure that each container is clearly labeled to identify the sample number. All samples, except those in glass jars, should be placed in paper bags within a plastic bag. Glass jars should be placed directly into a plastic bag. Do not store or submit samples in direct contact with plastic bags. Do not use tags for labeling purposes. Protect stored samples from tampering and maintain a chain of custody record.

b. Preservation

If samples must be stored temporarily, immediately refrigerate them to prevent deterioration of the sample and degradation of the chemical. For improved preservation, some samples may be frozen. However, if you choose to freeze samples, keep in mind they must be maintained in a frozen state during shipping. This means using dry ice. The preferred method of preservation is to ship the samples to the laboratory as soon as possible, to avoid the need to freeze samples. However, if needed, the following samples may be frozen:

- Whole leaf foliage
- Surface (swab)
- Clothing
- Soil
- Sediment
- Animals, Fish, Honeybees
- Air

The following samples, however, **must not be frozen**:

- Dislodgeable foliage residue (DFR)
- Water
- Commodity
- Tank-mix
- Formulations

Refer to the "Sampling Directions" section for additional information on the storage of a particular kind of sample.

c. Shipping

Packaging and shipping samples must be done properly to ensure they remain **intact** when they arrive at the analytical laboratory, and to ensure the safety of persons by preventing loss through spills, or leaks.

1) Place properly bagged (plastic over paper) and labeled samples in a shipping container and immobilize the samples with suitable packing material such as crumpled newspaper or Styrofoam.

2) Keep all liquid sample containers separated and carefully padded to guard against breakage. Pack liquid samples in sufficient absorbent material to absorb and retain any leakage that might occur.

3) Samples to be analyzed for pesticide residue (i.e., those other than tank-mix and formulation) are required to be cold or frozen during shipping to prevent deterioration.
   - Cold samples should be packed in an insulated container using sufficient "blue ice" to maintain the temperature throughout the shipping time.
   - Frozen samples should be placed in dry ice, wrapped in newspaper and placed in an insulated container such as a cooler. The insulated container is then placed inside a suitable shipping carton with adequate ventilation provided.

4) Mark your cooler and "blue ice" with your address in indelible ink and they will be returned to the appropriate regional office by mail or via DPR staff.

5) Record the chain of custody and include the **Sample Analysis Reports** (one per sample) in a separate plastic bag. When multiple samples are sent, include a sample site diagram, whenever possible, to assist the laboratory staff in determining the order in which to analyze the samples. Do not staple the **Sample Analysis Report** to the bag.

6) Comply with all applicable packaging and shipping requirements of the Department of Transportation.

7) Clearly mark shipping container with handling instructions, such as "Handle with Care," "Glass," "This Side Up," or other appropriate wording.

8) Seal the shipping container and ship or deliver the samples to the laboratory as soon as possible. Consult your EBL about the shipping method, but generally ship by the fastest method available, preferably overnight. Do not ship samples when they are likely to sit in transit over the weekend or other holiday periods. Only use direct delivery courier services.

Address the shipping container labels to: Department of Food and Agriculture
Center for Analytical Chemistry
3292 Meadowview Road
Sacramento, CA 95832

The label should also direct the shipping container to the appropriate section of the laboratory. The labels should state either:

1) ATTN: RESIDUE;
2) ATTN: FORMULATION (Only for a tank mix or formulation samples); or

3) ATTN: WORKER SAFETY (ONLY for DFR or WH&S approved clothing samples)

All hand-delivered samples should arrive at the laboratory between 8:00 a.m. and 4:00 p.m. on regular workdays. The laboratory often closes for lunch during the noon hour. If the delivery person anticipates arriving between 12:00 and 1:00 p.m., please call the laboratory ahead of time to ensure someone will be available to receive the samples. The laboratory's phone number is (916) 262-1434. The delivery person should check in at the receiving office, which is located at the south end of the main Chemistry Laboratory (3292 Meadowview Road). After the appropriate laboratory section has been notified, the delivery person will be given further instructions.

Exceptions to the 8:00 a.m. - 4:00 p.m. delivery times are when pre-arrangements have been made with the appropriate laboratory section(s) and during emergencies.

10. Completing the Investigative Sample Analysis Report/Custody Record Form (DPR-ENF-030 Rev. 3/16)

Form Instructions

Any official sample may become evidence in an administrative or judicial action. For this reason, accurately and completely fill out the Investigative Sample Analysis Report/ Custody Record form DPR-ENF-030. Failure to complete the form may result in a delay at the laboratory. **Always use a separate form for each sample submitted (investigative, duplicate, control, or subsample). Identify each sample as accurately as possible, and include a unique sample identification number.** You must obtain approval from your DPR Enforcement Branch Liaison or Regional Office prior to submitting a sample for lab analysis.

a. Investigative Sample Analysis Report
The CDFA laboratory (Anaheim or Sacramento) analyzing the sample, fills out the top portion of the form (above Section A). This includes entering the sample's laboratory number.

Section A. Sample Analysis Requester

1. **Agency Name.** Enter the name, telephone, and fax number of the agency submitting the sample. The form with the analysis results will be faxed to the number given. Enter an e-mail address if you prefer to receive the analysis results by email.
2. **Address.** Enter the number and street, city, state, and zip code of the agency submitting the sample.

Section B. Sample Source

1. Enter the property operator or complainant name, Operator Identification (I.D.) number or Restricted Materials (R.M.) Permit number, telephone number, and complete address.
2. Enter the section, township, and range (or GPS coordinates) if they are available.
3. Enter the site identification number from the R.M. Permit or Operator I.D. form.
4. Enter the sample location. A brief description of where the sample was taken should

be entered here. Distances from landmarks and field borders can be used. For example, “l/4 mile north of Wall Road and ½ mile south of Almond Street.”

5. Enter the name of the county where the sample was collected.

Section C. Sample Information

Important: Submit a separate form for each sample or subsample. The sample identification number on the sample container must match the sample identification number on the Investigative Sample Analysis Report. The laboratory will assign its own “laboratory number” to each sample when it is received.

1. **Sample consists of:** Be specific about the type and amount of the sample. If the sample is a commodity, give the specific name. For example: “1 pound of tomato foliage;” or “1 pound of strawberry fruit;” or “1 pound of soil taken between 2” and 6” deep.” **Tank mixes:** As much information as possible should be given for tank mix samples. Include the name and approximate percentages of any fertilizers, stickers, spreaders, buffers, and active ingredients in the mix.
2. **Commodity/Acres (if applicable):** Enter the name and variety of the commodity (e.g. Peach (Red Baron). If samples are taken from the field, include the total acres of the commodity being sampled.
3. **Sample identification number**: Make these numbers logical and consecutive, especially for samples associated with the same case. One suggested numbering system is: your initials-date (month-day-year)-sample sequence number. For example: you (JW) collect a first sample on November 9, 2014. The sample number would be JW-110914-1. The identification marks on the sample container must **match** the identification marks on the Investigative Sample Analysis Report.
4. **Structural-Related:** Check the box if it is a structural pest control-related sample.
5. **Sample Priority:** Contact the EBL to determine the sample priority. Review the criteria for priority on the reverse side of the Investigative Sample Analysis Report, consult with your DPR EBL or regional office to assign the sample priority, and check the appropriate box. Routine samples are analyzed on a first-come, first-served basis, in order of priority.
6. **Basis for sample:** Check one box only, based on information available.
7. **Is the sample a control?** Check the appropriate box.
8. **Is the sample a composite?** Check the appropriate box.
9. **Is the sample a surface swab?** Check the appropriate box. If yes, indicate surface area and solvent used. Since swab samples of spilled tank mixes or concentrates require special handling, make a note of this on the sample analysis report. The laboratory uses different analytical methods for swabs. **Always list the type of solvent used when taking a swab sample.**
10. **Is the sample a dislodgeable sample?** If yes, indicate punch size. Dislodgeable samples should be given “Priority 1” and marked “Human Health Hazard.” Include the leaf punch size (diameter) and the exact number of leaf punches in the sample.
11. **Description of problem/DPR Tracking number:** Note here the nature of the complaint or investigation. For example: “Resident complaint of illness from application of Propiconazole to almonds.” If the sample has been assigned a tracking or case number, record it in this area.
12. **Sample collector (Print Name):** Print name here.
13. **Signature:** Sample collector signs name here.

14. **Date Sampled:** Enter date sample was collected (month/day/year).

Section D1. Sample Discard Instructions

1. **Discard date, if different:** Unless instructed otherwise, the laboratory will discard the sample 3 months after completion of the analyses. If you need the sample retained longer than 3 months, enter a discard date. Otherwise, enter N/A (not applicable).

Section D2. Sample Condition Upon Receipt (Laboratory Use Only)

1. **Sample condition acceptability:** Sample condition will be evaluated and reasons given if the condition of a sample is found unacceptable.

Section E. Laboratory Determination Results

1. **Analysis Requested:** Under "Analysis Requested" there are two boxes: "Specific Pesticide(s)" and "Pesticide Screens." If the investigation requires the analysis of a sample for specific pesticides, check the "Specific Pesticide(s)" box and specify the pesticides in the spaces below. There is space for up to six pesticides. Alternatively, if the investigation requires the sample to be analyzed using the multi-residue screens, which detect more than 300 pesticide compounds, check the "Pesticide Screens" box.

2. **Results:** The laboratory will report the amount and detection limit of a pesticide in parts per million (ppm), micrograms per sample (µg/sample), or percentage, depending on the type of sample.

a. Results for foliage, soil, and water samples are reported in ppm.
b. Results for surface/swab, dislodgeable, or clothing samples are reported in µg.
c. Results for tank mixes or concentrates are given in percentages.

You will receive data from the laboratory including the amount detected, unit, detection limit (minimum amount detected), laboratory extraction and detection codes, and the analyst's initials. The extraction and detection code abbreviations are defined on the reverse side of the investigative sample analysis report.

The last row of Section E is completed by the laboratory and includes the lab analyst's signature, date of analysis completion, and signature of the reviewer (lab supervisor). The laboratory will use the section at the bottom of page 1 of the form when emailing or faxing the laboratory results to the submitter.

b. Investigative Sample Analysis Report- Custody Record

Section F. Sample Information

1. Print the sample collector's name and the sample identification number; the laboratory will complete the laboratory number.

Section G. Preservation Method During Transport

1. Check appropriate box for method of keeping the sample from deteriorating.

Section H. Primary Sample Container Description

1. Check the appropriate box for the primary sample container (e.g., paper bag), not the secondary container or the shipping container

Section I. Transport Information

1. **Name and Location of Common Carrier (if used):** If a commercial carrier is used, complete information regarding shipping company and company location, invoice number, DOT Number/Classification (if necessary), with date and time shipped in the appropriate boxes.
2. **Regional Office Contacted:** Contact the appropriate Environmental Branch Liaison (EBL) or Regional Office to confirm sample will be collected, analyzed, and sent to the correct laboratory. Check the appropriate box.
3. **Destination:** Indicate the sample destination laboratory (Sacramento or Anaheim).
4. **Sample Collector**: Print Name.
5. **Signature**: Sample Collector Signature.
6. **Date**: Date Sample Collector completes form, prior to transport.

Section J. Chain of Custody

1. The sample deliverer and receiver must sign the appropriate boxes in the presence of each other every time the sample changes hands unless the sample is being delivered to or received from CAC storage (i.e., freezer, refrigerator) or the sample is being shipped by a common carrier. The person that packages, seals, and delivers a set of investigative samples to a common carrier must sign the next available received-from box and write the name of the common carrier in the corresponding delivered-to box.
2. Record the date, time, and purpose (for shipping, for storage, or for analysis) of the change in custody.
3. If sample is stored, note the storage location.
4. If the Chain of Custody is incomplete, the laboratory cannot legally verify the resulting analysis because of the unknown history of the sample.

When samples are shipped to the CDFA Center for Analytical Chemistry (the Lab) by common carrier (e.g., FedEx, UPS), the laboratory personnel will inspect the sealed package containing the samples and certify there is no sign the package has been opened or tampered with prior to its delivery to or in the laboratory receiving room by signing and dating the DPR-ENF-030 directly below Section J.

If shipping the sample by UPS, FedEx, or USPS, indicate that the sample was delivered to the specific carrier location on the date shipped. At a hearing, you may have to testify more specifically that you properly packaged and addressed it to the lab with appropriate shipping charges or postage, and how you delivered it to the carrier.

The foundation for this procedure as a routine business practice can be presented at a hearing. The carrier can then be portrayed as a neutral third party who is in this business and who professionally transported the evidence. The lab can testify (perhaps by document) they received the evidence from the carrier as a routine business practice and the package did not appear to have been tampered with.

B. Documentary Evidence Collection

1. Diagrams

Diagrams (computer generated or hand drawn) can provide graphic images of the incident location. Add your information to a copy of existing field maps as diagrams whenever possible as they can provide an accurate layout of the location and already include some of the necessary information. Record all pertinent information on the diagram. The diagrams should also provide an indication of dimensions and orientation (north is usually up).

Information to consider adding to the diagram are:

- the incident site;
- the pesticide application site;
- application pattern and direction;
- wind direction;
- landmarks such as buildings and roads;
- crops and their acreages;
- the location of witnesses;
- sample sites and numbers;
- site and direction of photographs

2. Photographs

Photographs provide visual documentation of a situation or object. Photographs showing drift, crop damage, tarp tears, or damaged application equipment (e.g., ruptured hose) are important documentation that an incident occurred. Photographs of product labels provide evidence of the product involved when a detachable label cannot be obtained. Photographs should be labeled with:

- the date and
- photographer's ID
- a brief description describing the photograph

For photographs showing small-scale exhibits, place a scale reference such as a ruler next to the exhibit. DPR has an electronic photo mount posted in the DPR website for use by CAC staff. Consult with your EBL for assistance locating the photo mount.
www.cdpr.ca.gov/docs/enforce/prenffrm/prenf130.pdf

3. Field Notes

Field notes have great value because they were made at the time of the inquiry. They are the basis for the investigative report. The investigative report is only as good as the field notes taken during the investigation of the incident. It is best to structure your notes in chronological order. Entries should begin by identifying the subject matter, date, time, and location of the activity. Other vital information may include the names and title of the injured person, witnesses and employer or employer representative; a description of the incident site;

weather conditions; and location and type of samples collected, including the chain of custody. Organized field notes will facilitate the composition of your narrative report.

Include all information found in your field notes in the narrative report. After you complete your investigative report, compare it to your field notes. Once the agricultural commissioner accepts the final report, you may destroy your field notes if:

1) You incorporate them in your final report,
2) It is consistent with county policy

Field notes retained in the normal course of business may be considered public records. Interview questionnaires are not considered field notes as it is generally impractical to include all the information from the questionnaires in the written report. Attach the interview questionnaires to the investigative report.

IV. THE INVESTIGATIVE REPORT

A. General Comments

The investigative report should only state the facts and contain all relevant evidence. You must maintain an impartial position at all times and the report must not reflect personal opinions. Information about farming practices, etc., that is generally accepted as common knowledge within the industry, but may not be known by DPR staff, hearing officers, and others who review the investigative reports can be included in the report. Findings that do not support the allegation can also be included as they can help direct the reviewer to form a valid conclusion and, in addition, demonstrate the thoroughness of the investigation. Omitting information from the report can lead to the conclusion that you failed to investigate all aspects of the incident.

Based on the information obtained during the investigation, you must only draw conclusions within his/her scope of expertise. For example, conclusions pertaining to violations of the laws and regulations fall within your expertise. **Do not make conclusions based on medical information discovered during the investigation or draw conclusions about the relationship of the exposure and the illness.** This falls outside the scope of your expertise and is the role of the Pesticide Illness Surveillance Program's Scientists.

B. Report Writing:

Your report is the definitive record of an investigation. It is an orderly account of where you went, what you did, who you spoke with, and all of the information and evidence you obtained relevant to the incident. It answers the questions of who, what, when, where, why and how. The report should be logical and accurate, as well as complete and concise. A well-written report gives the reader confidence in your education, experience, objectivity, and professionalism, as well as reflecting positively on your department. When writing reports, do the following:

- Write in the first person and active voice
- Keep sentences simple and direct
- Use everyday language when possible, but beware of emotionally loaded terms that could lead people to question your objectivity
- Include enough detail that those who were not involved with the case, or unfamiliar with local conditions, practices, and the laws and regulations can follow your report. In addition to DPR and your supervisors, your reports may be read or used by hearing officers, district attorneys, the respondents, and the public.

Identify all the areas of regulatory concern that you investigated. Document or collect evidence that support all violations but do not exclude information that supports compliance with laws and regulations. Remember DPR and your supervisors use your reports to assess the need for enforcement action. If you identify any violations, the report must identify those violations and supply information from which to gauge the degree or severity of violation.

The report should identify the source of all information and statements included in the report. When referring to people in the report, use the initial of their first name followed by their last name. Type the name in capital letters. Handling names in the report this way will assist staff in removing the names to fulfill public disclosure of records requests.

Example: John Doe would be referred to as J. DOE

C. Standard Narrative Format

To facilitate well-organized and informative investigative reports, the report must include the following standard narrative elements.

Summary: One paragraph summarizing the incident.

Background Information: Pertinent background information related to the incident.

Violations: List all violations of the laws, regulations, and labeling found during the investigation, including violations that did not contribute directly to the incident.

Witnesses: List of all witnesses involved in the incident. For each person, list his/her name, employer (if applicable), address, and telephone number.

Investigation and Statements: The narrative portion of the investigation report detailing how the incident occurred. Witness interview statements/summaries are included in this section. For each interview, state the date and time of the interview, who conducted the interview, how you conducted the interview (i.e., in-person, over the telephone), where you conducted the interview, the translator (if applicable), and if anyone else was present during the interview.

Findings: Summarize the investigative findings supported by the evidence. Provide information identifying and supporting the elements of any violations found during the investigation.

Attachments: List of supporting evidence for the investigation.

D. Investigation Report Forms – Overview

For all pesticide investigations, the PEIR form (PR-ENF-127) must be completed.

Use the following guidelines to complete the PEIR form series (PR-ENF-127 and PR-ENF-127 A through D,). Begin the summary of the investigation on the PR-ENF-127 face sheet. State "refer to narrative" or "see attached" only to indicate continuation if sufficient space is not available on the face sheet. It is not necessary to repeat information in the narrative that is clearly stated on the face sheet.

If you need additional space or to update information at a later time, use the Supplemental Report form (PR-ENF-127A). Typed narrative reports may be substituted for the supplemental form.

When several people are involved as witnesses, complainants or injured, record each person on the Episode Witness/Injured/Complainant Report form (PR-ENF-127B) to record specific personal data. All illnesses stemming from the same incident can be summarized in one report to avoid the need to prepare several similar narrative reports. You may find this particularly useful for human cluster illness incidents.

Include a map or sketch to show damage patterns or sampling locations. Use the Episode Site Diagram form (PR-ENF-127C) for this purpose. Existing farm maps may be substituted, when appropriate.

Agricultural field workers with dermal symptoms require you to gather certain specific information relevant to the situation. Use the Field Worker Dermatitis Supplemental Report form (PR-ENF-127D) to document activities that were performed. The simple check box format helps avoid the need for long narrative reports.The following table lists the forms and their use for episode investigation reports.

Form #	Title	Use
PR-ENF-127	Pesticide Episode Investigation Report (PEIR)	Required for all investigative reports.
PR-ENF-127A	Pesticide Episode Investigation Supplemental Report	Narrative report. Typed reports may be submitted on regular copy paper.
PR-ENF-127B	Episode Witness/Injured/ Complainant Report	Reporting of additional persons involved (exposed, witnesses or complainants).
PR-ENF-127C	Episode Site Diagram	Detailed diagram of incident area. Existing permit maps may be substituted, when appropriate.
PR-ENF-127D	Field Worker Dermatitis Supplemental Report	Provides specific information relevant to field worker dermal exposure.

E. Investigation Report Forms: Completing the Forms

1. Pesticide Episode Investigation Report (PR-ENF-127)

The following guides you in completing the Pesticide Episode Investigation Report form (PR-ENF-127). PR-ENF-127 Form is the first page of all reports.

General Information:

Page: Use the space to indicate the total number of pages in the report excluding appended records or other supporting evidence.

Received By: State the name of the person within the investigating agency who first received notification about the incident. Do not use this line to record internal agency assignment of investigative duties. The purpose of this information is to document the official notification of the occurrence of the incident and the beginning of the investigation.

Received From: Record the name of the person who provided the first notification of the incident to the investigating agency.

Representing: Record the agency, firm, or organization of person giving the notification.
Date/Time Received: Record the date and time of notification.
Type of Episode: Check the appropriate box(es) that apply. If human effects, indicate the number of people involved. If property loss/damage, indicate the estimated value. If a Report of Loss was filed, use the reported value estimate. Identify the source of the value estimate in the narrative, if not otherwise identified. If an environmental effect, identify the type of effect. If none of the above, check other and explain.

Priority Episode Investigation: If the investigation involves a priority episode, check "yes" and record the priority number assigned by DPR. Otherwise, check "no".

Other I.D. No.: An optional box the CAC may use for a separate CAC tracking number or for an identifying number assigned by another governmental agency. There are separate boxes for WH&S case number and priority episode number.

County of Occurrence: Write the name of the county where the incident occurred. Do not substitute the designated county number.

Date/Time of Occurrence: Record the date and time the incident occurred. The date must reflect the actual date of occurrence, which may differ from the date listed on the PIR/DFROII.

Episode Location: Clearly and concisely state where the incident occurred (i.e., name of business/place of employment, address of private residence, field identification number).

Person Notified/Date: For each of the listed agencies, identify anyone notified of the incident. Record the date of notification.

Injured/Complainant Information:

Complaint Signed: Indicate "yes" if the complainant filed a Report of Loss, Nonperformance or Damage form (PR-ENF-008), Report of Human Exposure or Unsafe Condition form (PR-ENF-074) or a signed written statement, otherwise check "no" or "N/A" as appropriate.

Doctor Visited: Check "yes" or "no" to indicate whether the injured person or complainant sought medical attention following the alleged exposure. Check "N/A" if the incident does not involve human effects.

Extent of Injury/Illness: This box is applicable only to incidents involving *human effects*. Check the appropriate box to indicate the effects. Check one of the following:

- Fatal: The person died.
- Serious: The person required hospital admission as "in-patient status."

- Symptoms: The person had signs or symptoms but was not admitted to the hospital as "in-patient status" or did not seek medical care.
- Exposed only: The person was exposed but did not experience signs or symptoms of illness or injury.

Activity of Person Exposed/Involved: Indicate the individual's specific activity when the exposure occurred. This may be different from occupation. This applies to *both* agricultural and non-agricultural cases. Check one of the following:

- Mixer/loader: The exposure occurred while the individual prepared a pesticide for application.
- Applicator: The exposure occurred while the individual applied a pesticide (including antimicrobial pesticides) by any method. Field workers applying pesticides in irrigation water (chemigation) are considered applicators.
- Field worker*: The exposure occurred while the individual worked in an agricultural field and was not involved in a pesticide handling process.
- Public*: The exposure occurred while the individual was not working.
- Other*: The exposure occurred in an occupational setting other than those named above.

*If an individual becomes ill after mixing, loading and applying a pesticide, and cannot identify an exposure event, check both activities.
*Specify the individual's activity in the "explain" space if "field worker", "public", or "other" is checked.

Name, Address, Age, Gender (Sex), and Phone: Complete the personal identification information about the injured/complainant.

WH&S No.: Enter the assigned WH&S number (i.e. 20XX-XXX). For human effects incidents, WH&S assigns each individual a separate case number. For episodes identified by alternate means, there may be no WH&S number. In this case, leave the WH&S number blank.

Workdays Lost: Indicate the number of days the injured/complainant remained off work (or other accustomed activity, such as school attendance) or were unable to return to their normal activities due to the effects of the alleged exposure.

- Do not count the day the person was first injured and/or sought medical attention.
- Do not include the individual's normal day(s) off in the total number of workdays lost. If disability status is ongoing, indicate "indefinite" in the box and explain in the narrative.
- If the affected person was not able to be interviewed or could not recall if he/she experienced a period of disability, enter "unknown". Days lost should be recorded in full days. ***N/A is not an acceptable entry.***

Medical Facility Name: Record the name of the medical facility (hospital, clinic, etc.) where the person sought medical attention.

Treatment/Observation: Check "treatment provided" if the individual received treatment by a physician or medical facility. Check "observation only" if medical personnel evaluated the individual, but provided no treatment.

Hospitalized: Was the patient formally admitted to the hospital (inpatient status: check yes or no).

Date and Time Admitted/Discharged: Record the date and time of both hospital admission *and* discharge. If the doctor admits the individual directly from the emergency room, count the time spent in the emergency room as hospitalization.

Physician, Address, Phone: Complete the information about the principal attending physician.

Signs/Symptoms: List the effects attributed to the exposure by the injured person and/or the physician. Acquire the information by interviewing the injured person to verify the information provided on the PIR/DFROII, as it may be incomplete or inaccurate.

Employer, Address, Phone: Record the information about the injured person's employer at the time of the exposure. If self-employed, state "self-employed" in this space and the nature of their business.

Protective Measures (Engineering Controls and Personal Protective Equipment) Used: **This section is very important in determining the cause of the illness/injury and how it may have been prevented.** Check the boxes that most accurately describe the protective measures **worn or used** by the injured/complainant **at the time of the alleged exposure.** If the protection used is not listed, check "Other" and explain in the space provided. If no protective measures were used, check "none". **Fill out this section even for non-handling activities. N/A is not an acceptable entry.** Additional information is listed below for some of the check boxes:

- **Safety glasses**: Safety glasses as specified in 3CCR section 6738.2

- **Work Clothing**: Work clothing as defined in 3CCR section 6000. This could also include an individual wearing street clothes in non-occupational cases.

- **Coveralls**: Employer-provided garment meeting specifications listed in 3CCR section 6000, Coverall definition. Specify the type of coverall (i.e., cloth, disposable) worn.

- **Chemical-Resistant Clothes**: Employer-provided clothing made of specific materials that meet the specifications listed in 3CCR section 6000, Chemical Resistant definition.

- **Other**: Check this box when the type of clothing/equipment matches no existing protective measures category. Do not check "Other" and enter "None" for "Other Protective Measures" unless the individual wore no clothes. For an individual wearing ordinary street clothes, it is suggested to check "Work Clothes".

- **Closed System**: A procedure for handling pesticides that avoids hand-pouring and meets the specifications listed in 3CCR section 6746, Closed System definition.

- **Enclosed Cab**: A chemical-resistant barrier meeting the specifications listed in 3CCR section 6000, Enclosed Cab definition.

Environmental or Property Damage:

Description of Damage: Describe the damage and nature of the effects.

Amount/Value: Record the amount or value as estimated by the complainant or by you. This value may be stated in terms of acres, tons, trees, or dollar amounts. Identify the source of the estimate in the narrative.

Owner, Address, Phone: Record the information of the property owner. For leased fields, list the lessee. If the owner is listed as the injured or complainant, state "same as above".

Alleged Respondents:

Status: If you suspect a person or company (PCA, dealer, etc.) of being responsible for the incident, check their status. If "other" is checked, explain in the space provided at the bottom of the Alleged Respondents section.

Name, Address, And Phone: Complete with the information known about the person or firm suspected of being responsible for the incident. If a licensee, record the name as it appears on the license.

License/Permit No.: If the person or firm holds a license, operator ID or restricted permit that was issued by DPR, SPCB or CAC, record the type and number. If more than one, record the type most directly related to activities that allegedly contributed to the incident.

Recommendation Made: Indicate if a Licensed Agricultural Pest Control Adviser (PCA) made a recommendation for the application. If a PCA made the recommendation, record the number in the space provided.

Employer's Name, Address: Record the name and address of the respondent's employer. If self-employed, state "self-employed". For non-occupational cases, put “N/A”.

Pesticide Information:

Pesticide Name/Manufacturer: Record the full name of the pesticide product (i.e., Roundup Pro Herbicide®, not Roundup) and the manufacturer. Record this information for all pesticides (including adjuvants) as well as any fertilizers or other components in the tank mix. For cases involving residue, list all materials applied to the field(s) of interest for the previous 30 days. List the pesticides from the most recent application in the provided space and identify the balance in

the narrative. For cases involving non-pesticidal chemicals, list the product name and manufacturer in the provided space. For incidents involving no chemicals, put "N/A".

EPA Registration Number or California Registration Number: Enter the EPA or California Registration Number from the pesticide product label, including the sub-registrant number, if applicable. Since most product labels do not include California's alpha code, obtain the code from the Registration Branch or from the DPR label database. This includes adjuvants that are not federally registered but require California registration (i.e., muriatic acid used for a swimming pool). The California Registration Number for these products can be obtained from the DPR product label database. If you are unable to obtain the pesticide product registration information, indicate "unknown". Do not attempt to obtain pesticide registration information via the internet or by visiting the vendor.

Category: Enter the toxicity category of the pesticide product as indicated by the signal word on the label.

- Category I – DANGER/POISON
- Category II - WARNING
- Category III - CAUTION
- Category IV - None required

Dose/Dilution/Volume: Enter the amount of pesticide product, diluent, and mixture applied per unit (for example: 2 lb. product/100 gallons water/acre).

Treatment Date: Record the date of application or use. Commodity/Site Treated: Record the crop, site, or item treated.

Equipment Type/Make/Model/Description: Identify the specific type(s) of application equipment used in the incident. For incidents where more than one pesticide application may have been contributory, list the specific type of equipment for each application. Examples of equipment include helicopter, air blast sprayer, boom sprayer, backpack sprayer, and hand pump sprayer. Be sure to include any identification number used by the firm. Describe the location and configuration of the nozzles. Record the use of electrostatic equipment or other technologies. **Entering only the manufacturer's name is not adequate.**

Episode Narrative:
Use the Standard Narrative Format listed in Section IV C.

Signatures:
Report Prepared By: Sign and date the report when it is completed.

Report Reviewed/Approved By: Name, title and signature of CAC supervisor or deputy commissioner who reviewed the report, and date it was approved.

2. Pesticide Episode Investigation Supplemental Report (PR-ENF-127A)

The following is a guide for completing the Pesticide Episode Investigation Supplemental Report form (PR-ENF-127A). Use this report form for the standard narrative report format. Typed narrative reports may be substituted for this form.

Page: Indicate where in the sequence of the report this sheet is located (i.e. page 7 of 15).

Location/Subject: Use a title or statement to identify the incident to which this relates (such as the name of injured/complainant or nature of effects).

Priority/ WH&S No.: If the incident is a Priority Episode investigation, record the assigned priority number in this box. If the incident is not a priority investigation and involves human exposure, record the WH&S number(s) in this box (if one has been assigned).

Other I.D. No., County of Occurrence & Date of Occurrence: See instructions for PR-ENF-127.

Narrative Continuation/Supplemental Report: Check the "narrative continuation" box if the form is used with the PR-ENF-127. If the form is used to amend a report or add additional information to a previous report, check "supplemental" report. If neither of these entries apply, check "other" and explain.

Remarks: See “Standard Narrative Format” under section IV (C) to facilitate well-organized and informative investigative reports. Within the narrative report and include all available information obtained during the investigation (see section II for information to include).

Report Prepared By & Report Reviewed/Approved By: See instructions for PR-ENF-127.

3. Episode Witness/Injured/Complainant Report (PR-ENF-127B)

Use the following as a guide when completing the Episode Witness/Injured/Complainant supplement (PR-ENF-127B) of the Pesticide Episode Investigation Report. Use this report form to record information about other people involved in the episode. A face sheet (PR-ENF-127) must be submitted with the report even when using this form.

The Witness/Injured/Complainant section must be completed for each injured person. For the first person identified, complete this information on the et. All other people should be put on the Episode/Witness/Injured/Complaint form (PR-ENF-127B). DPR will return Pesticide Episode Investigation Reports submitted without this section completed for those injured.

Page: Indicate where in the sequence of the report this sheet is located.

For all other sections of this form, refer to the corresponding instructions for PR-ENF-127.

4. Episode Site Diagram (PR-ENF-127C)

Use the following information as a guide:

Page, Location/Subject, Priority/ WH&S No., Other I.D. No., County of Occurrence & Date of Occurrence: See instructions for PR-ENF-127A.

Site Diagram: Draw, sketch, or include a digital diagram or map of the area that shows all pertinent information. Be sure to indicate the direction and all pertinent landmarks.

Legend and Comments: Include any information that will make the map readable.

Report Prepared By & Report Reviewed/Approved By: See instructions for PR-ENF-127.

5. Field Worker Dermatitis Supplemental Report (PR-ENF-127D)

The following is a guide for completing the Field Worker Dermatitis supplement (PR-ENF-127D) of the Pesticide Episode Investigation Report. Use this form only for agricultural field worker (not mixer/loader, applicator) dermatitis cases. A separate form should be completed for each injured employee. The Pesticide Episode Investigation Report must still be filled out for cases requiring this form.

Page, WH&S No., Other I.D. No., County of Occurrence & Date of Occurrence: See Instructions for PR-ENF-127A.

Person Providing Information:
Person Contacted: Check appropriate boxes for all person(s) contacted during the investigation.

Translation: Check appropriate box if the contacted person(s) speak English. Enter the name of person who served as the translator during the interview, if necessary.

Commodity and Work Activity Information:
Date of onset: Can the person recall when the dermatitis was first noticed? If so, please record the date in the space provided.

Record the commodity and site worked on the date of onset. Also record the site I.D. number, the block I.D., and the variety.

Field Condition: Check any of the field conditions the worker remembers, even if the exact location cannot be identified. When checking the "Other" box, please specify the field condition.

Specific Work Activity: Check the **specific** work activity of the worker when he/she first noticed the rash. When checking the "Other" box, please specify the type of work activity.

Application History:
Application History for Field of Onset: List all pesticides (including adjuvants) applied to the

field within the previous 30 days. If no pesticide applications occurred within the previous 30-day period, list the most recent application made to the field in question.

Application History Supplied By: Record the name and title of the person who provided the information for the application history.

Time Before Entry: Record the actual number of days between the last application and entry by the injured person. This may have no relationship to the legal reentry interval.

Exposure Information and Medical History:
Dermatitis Symptoms Experienced: Check all boxes that apply to indicate the nature of the dermatitis. When checking the "Other" box, please specify the type of dermatitis symptom.

Location(s) on the Body: Check all boxes that apply to indicate the areas of the body affected. When checking the "Other" box, please specify the body part involved.

Previous Medical History: Indicate if the employee recalls having a previous history of any of the conditions listed.

Protective Clothing Worn: Check the appropriate box to indicate what the employee remembers wearing to work at the onset of the dermatitis. When checking the "Other" box, specify the type of clothing worn.

Comments: Record any information specific to the injured person that will assist in determining how exposure occurred and the extent of exposure. For example:

- What activities were done outside of work when symptoms were first noticed?
- Was there anything new at home (e.g., using new soap)?
- Is there anyone else at home experiencing the same symptoms?

Report Prepared By & Report Reviewed/Approved By: See Instructions for PR-ENF-127.

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V. DISPOSITION OF THE EPISODE INVESTIGATION REPORT

Upon completion of the Investigation Report by the CAC, the report is forwarded to DPR. Remember that if the CAC determines an incident is actually the jurisdiction of a different county, be sure to notify WH&S immediately (< 6 months) for human health incidents so they can transfer the case in CalPEATS as soon as possible to allow the investigating county adequate time.

A. Priority Episode Investigations

For a Priority Episode investigation, the CAC will upload the investigative report along with all supporting documents to CalPEATS. The DPR Enforcement Branch Liaison EBL has 15 working days to review the investigative report. The EBL notifies the CAC of any questions, concerns, or changes to be made and the CAC re-submits the corrected investigative report to CalPEATS. The 15 working day review process starts over until the EBL informs the CAC that the investigative report is complete.

B. Non-Priority Human Effects Episodes

Forward non-priority human illness investigations directly to WH&S through CalPEATS for review and evaluation. This also includes illness reports that do not have a WH&S number and were investigated by the CAC (e.g., allegation of illness directly reported to the CAC by any person or other government agencies). Note that if the jurisdiction is of a different County, be sure to transfer the case to DPR WH&S at the earliest time possible (< 6 months).

C. Employee/Citizen Complaints

The complainant has the right to receive a written report of your findings. Inform the complainant of any actions taken relative to the complaint and the reasons for such action (*Labor Code section 6309* requires a written report for employee complaints). This report should be specific and normally in the form of a letter to the complainant. If DIR referred the complaint to the CAC, send a copy of your findings to DIR.

D. Illegal Residue

Forward all reports of illegal residues (NTE and over tolerance) referred by DPR for follow-up to the appropriate EB regional office.

E. Non-Priority Environmental Effects, Property Loss or Damage

Upload to CalPEATS all non-priority episode investigation reports concerning property loss, animal (domestic and wild), fish or bird poisonings, or other environmental effects.

F. Public Records Requests

There are two principle California laws governing the handling of government held records. These laws are the Public Records Act (PRA) (*Government Code section 6250, et seq.*) and the Information Practices Act (IPA) (*Civil Code section 1798, et seq.*). In addition, Proposition 59, passed in 2004, makes the public's right to records a constitutional right and requires that statutes be broadly construed if they further the public's access to records and narrowly construed if they limit that right.

It should be presumed initially that all records, regardless of physical form or characteristics, including electronic records, held by DPR and CACs are public. However, some records, such as medical information and personal information, are normally precluded from disclosure (release) to protect the privacy of individuals. Other records, such as investigation files and some pre-decisional documents, are permitted to be held in confidence to facilitate efficient operation of the agency.

Generally, DPR and other agencies will not release files on pending investigations to the public.

For complaints, when a complainant requests confidentiality or when it is otherwise required:

- Avoid including the name of the complainant in any investigative report.
- If reference to the complainant is necessary to the narrative, simply state "a complaint was received."
- The statements of the complainant can be included in the report without referencing the fact that he/she was the initial complainant.
- If the issue comes to a hearing and the case can be made against the respondent without the testimony of the complainant, there is no need to release any information concerning the complaint or the identity of the complainant to the respondent as part of the proceeding.

Records that are protected from public disclosure may be released to other State agencies that agree to treat the material as confidential without losing their protected status.

Each CAC should develop a procedure for handling requests for release of records and have it reviewed by your county counsel.

For a more comprehensive description of the State laws and of the DPR procedures and requirements regarding public records requests, see Compendium Volume 1, Appendix B at: https://www.cdpr.ca.gov/docs/enforce/compend/vol_1/index.htm .

VI. APPENDICES

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Appendix A

Acronym Index

Acronym	Name
3CCR	Title 3, California Code of Regulations
CAC	County Agricultural Commissioner
CACASA	County Agricultural Commissioners and Sealers Association
Cal/OSHA	California Occupational Safety and Health Administration
CalPEATS	California Pesticide Enforcement Action Tracking System
CDFA	California Department of Food and Agriculture
DFG	Department of Fish and Wildlife
DFR	Dislodgeable foliar residue
DFROII	Doctor's First Report of Occupational Illness and Injury
DIR	Department of Industrial Relations
DPR	Department of Pesticide Regulation
EB	Enforcement Branch
EBL	Enforcement Branch Liaison
FAC	Food and Agricultural Code
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
IPA	Information Practices Act
MOU	Memorandum of Understanding
SDS	Safety Data Sheet
NTE	No Tolerance Established
PEIR	Pesticide Episode Investigation Report
PENR	Pesticide Episode Notification Record
PIR	Pesticide Illness Report
PPE	Personal protective equipment
PRA	Public Records Act
REI	Restricted entry interval
US EPA	United States Environmental Protection Agency
WH&S	Worker Health and Safety Branch

Appendix B

Department of Industrial Relations, Division of Workers' Compensation (DWC) Information & Assistance Unit - District Offices

Anaheim 1065 N. Pacificenter Drive Anaheim 92806-2141 (714) 414-1801	**Oxnard** 1901 N. Rice Ave., Ste. 200 Oxnard, CA 93030-7912 (805) 485-3528	**San Francisco** 455 Golden Gate Avenue, 2nd floor San Francisco, CA 94102-7014 (415) 703-5020
Bakersfield 1800 30th Street, Suite 100 Bakersfield, CA 93301-1929 (661) 395-2514	**Pomona** 732 Corporate Center Drive Pomona, CA 91768-2653 (909) 623-8568	**San Jose** 100 Paseo de San Antonio, Room 241 San Jose, CA 95113-1402 (408) 277-1292
Eureka * Satellite office 409 K St Room 201 Eureka, CA 95501-0481 (707) 441-5723	**Redding** 250 Hemsted Drive, Second Floor, Ste. B Redding, CA 96002 (530) 225-2047	**San Luis Obispo** 4740 Allene Way, Suite 100 San Luis Obispo, CA 93401-8736 (805) 596-4159
Fresno 2550 Mariposa Mall, Room 5005 Fresno, CA 93721-2219 (559) 445-5355	**Riverside** 3737 Main Street, Room 300 Riverside, CA 92501-3337 (951) 782-4347	**Santa Ana** 2 MacArthur Place, Suite 600 Santa Ana, CA 92707-7704 (714) 942-7576
Long Beach 300 Oceangate Street, Suite 200 Long Beach, CA 90802-4304 (562) 590-5240	**Sacramento** 160 Promenade Circle, Suite 300 Sacramento, CA 95834-2962 (916) 928-3158	**Santa Barbara** * Satellite office 130 E Ortega St. Santa Barbara, CA 93101-7538 (805) 884-1988
Los Angeles 320 W. 4th Street, 9th floor Los Angeles, CA 90013-1954 (213) 576-7389	**Salinas** 1880 North Main Street, Suite 100 Salinas, CA 93906-2037 (831) 443-3058	**Santa Rosa** 50 "D" Street, Room 420 Santa Rosa, CA 95404-4771 (707) 576-2452
Marina del Rey 4720 Lincoln Blvd 2nd floor Marina del Rey, CA 90292-6902 (310) 482-3820	**San Bernardino** 464 W. Fourth Street, Suite 239 San Bernardino, CA 92401-1411 (909) 383-4522	**Stockton** 31 East Channel Street, Room 344 Stockton, CA 95202-2314 (209) 948-7980
Oakland 1515 Clay Street, 6th floor Oakland, CA 94612-1519 (510) 622-2861	**San Diego** 7575 Metropolitan Drive, Suite 202 San Diego, CA 92108-4424 (619) 767-2082	**Van Nuys** 6150 Van Nuys Blvd., Room 105 Van Nuys, CA 91401-3370 (818) 901-5367

Source: http://www.dir.ca.gov/dwc/IandA.html

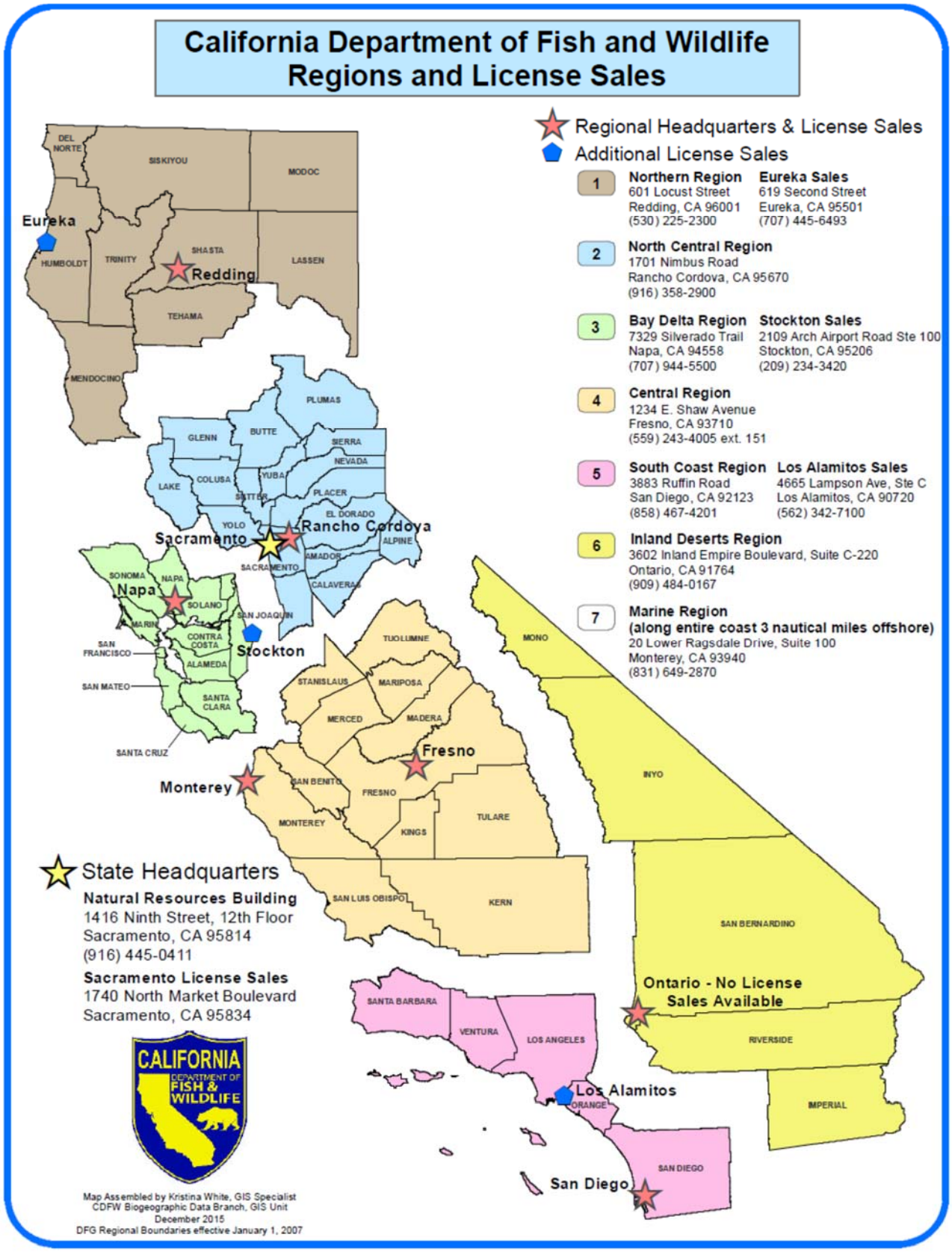
Appendix C

Division of Labor Standards Enforcement-District Offices

Bakersfield 7718 Meany Ave Bakersfield, CA 93308 (661) 587-3060	**Oakland-Headquarters** 1515 Clay Street Room 401 Oakland, CA 94612 510-285-2118	**San Jose** 100 Paseo de San Antonio, Room 120 San Jose, CA 95113 (408) 277-1266
El Centro 1550 W. Main St. El Centro, CA 92243 (760) 353-0607	**Redding** 250 Hemsted Drive, 2nd Floor, Suite A Redding, CA 96002 (530) 225-2655	**Santa Ana** 2 MacArthur Place Suite 800 Santa Ana, CA 92 (714) 558-4910
Fresno 770 E. Shaw Avenue, Ste. 222 Fresno, CA 93710 (559) 244-5340	**Sacramento** 2031 Howe Avenue, Suite 100 Sacramento, CA 95825 (916) 263-1811	**Santa Barbara** 411 E. Canon Perdido, Room 3 Santa Barbara, CA 93101 (805) 568-1222
Long Beach 300 Oceangate, Suite 302 Long Beach, CA 90802 (562) 590-5048	**Salinas** 950 E. Blanco Rd., Suite 204 Salinas, CA 93906 (831) 443-3041	**Santa Rosa** 50 "D" Street, Suite 360 Santa Rosa, CA 95404 (707) 576-2362
Los Angeles 320 W. Fourth Street, Suite 450 Los Angeles, CA 90013 (213) 620-6330	**San Bernardino** 464 W. Fourth Street, Room 348 San Bernardino, CA 92401 (909) 383-4334	**Stockton** 31 E. Channel Street, Room 317 Stockton, CA 95202 (209) 948-7771
Oakland 1515 Clay Street, Suite 801 Oakland, CA 94612 (510) 622-3273	**San Diego** 7575 Metropolitan Dr., Room 210 San Diego, CA 92108 (619) 220-5451	**Van Nuys** 6150 Van Nuys Blvd., Room 206 Van Nuys, CA 91401 (818) 901-5315
	San Francisco 455 Golden Gate Avenue, 10th Floor San Francisco, CA 94102 (415) 703-5300 DLSE2@dir.ca.gov	**Van Nuys - Entertainment Work Permits** 6150 Van Nuys Blvd., Room 100 Van Nuys, CA 91401 (818) 901-5484 Walk In Service Available At This Location: 9:00 a.m. to 12:00 p.m. - Monday and Friday 9:00 a.m. to 4:00 p.m. - Tuesday, Wednesday and Thursday

DLSE2@dir.ca.gov
Source: https://www.dir.ca.gov/dlse/DistrictOffices.htm
Note: Locations and telephone numbers are subject to change

Appendix D


California Department of Fish and Wildlife
Regions and License Sales
Regional Headquarters & License Sales
Additional License Sales
1 Northern Region
601 Locust Street
Redding, CA 96001
(530) 225-2300
Eureka Sales
619 Second Street
Eureka, CA 95501
(707) 445-6493
2 North Central Region
1701 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2900
3 Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
(707) 944-5500
Stockton Sales
2109 Arch Airport Road Ste 100
Stockton, CA 95206
(209) 234-3420
4 Central Region
1234 E. Shaw Avenue
Fresno, CA 93710
(559) 243-4005 ext. 151
5 South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
Los Alamitos Sales
4665 Lampson Ave, Ste C
Los Alamitos, CA 90720
(562) 342-7100
6 Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
(909) 484-0167
7 Marine Region
(along entire coast 3 nautical miles offshore)
20 Lower Ragsdale Drive, Suite 100
Monterey, CA 93940
(831) 649-2870
State Headquarters
Natural Resources Building
1416 Ninth Street, 12th Floor
Sacramento, CA 95814
(916) 445-0411
Sacramento License Sales
1740 North Market Boulevard
Sacramento, CA 95834
CALIFORNIA DEPARTMENT OF FISH & WILDLIFE
Map Assembled by Kristina White, GIS Specialist
CDFW Biogeographic Data Branch, GIS Unit
December 2015
DFG Regional Boundaries effective January 1, 2007
Eureka
Redding
Sacramento
Rancho Cordova
Napa
Stockton
Fresno
Monterey
Ontario - No License Sales Available
Los Alamitos
San Diego
DEL NORTE
SISKIYOU
MODOC
HUMBOLDT
TRINITY
SHASTA
LASSEN
TEHAMA
MENDOCINO
PLUMAS
GLENN
BUTTE
SIERRA
NEVADA
LAKE
COLUSA
YUBA
SUTTER
PLACER
EL DORADO
YOLO
ALPINE
AMADOR
SACRAMENTO
CALAVERAS
SONOMA
NAPA
SOLANO
SAN JOAQUIN
MARIN
CONTRA COSTA
SAN FRANCISCO
ALAMEDA
SAN MATEO
SANTA CLARA
SANTA CRUZ
TUOLUMNE
MONO
STANISLAUS
MARIPOSA
MERCED
MADERA
SAN BENITO
FRESNO
TULARE
MONTEREY
KINGS
INYO
SAN LUIS OBISPO
KERN
SAN BERNARDINO
SANTA BARBARA
VENTURA
LOS ANGELES
RIVERSIDE
ORANGE
IMPERIAL
SAN DIEGO

Appendix E

1. Suggested Interview Questions for Exposures and Illnesses - English

a. Pesticide Handler - Employee

Record the name of the interviewer, date, time, and location. The name, address, age (date of birth), gender, telephone number, and work activity of the interviewee also needs to be recorded.

Review the regulatory requirements for a pesticide handler. Ask the pesticide handler questions about training, personnel protective equipment, etc. to ensure other regulatory requirements are in compliance. Questions should not be limited to the suggested questions.

1. Who is your employer (Who pays you? Do you work for a farm labor contractor, a farmer, etc.?)
2. How long have you been working as a handler?
3. Who provided your training?
4. When was your last training?
5. When you were exposed or became ill, what pesticide(s) were you handling? [For flaggers: Did you know what pesticides were applied?]
6. What type of application equipment were you using?
7. [For flaggers: Who made the application? Describe the type of aircraft used.]
8. Were any engineering controls used (closed system, enclosed cab)
9. When did the exposure occur?
10. Where did the exposure occur?
11. How did the exposure occur? Was it dermal, inhalation, or ingestion?
12. Did you come in direct contact with the pesticide? Describe what you felt, tasted, saw, and smelled during this experience.
13. What was your location? What was the distance between you and the applicator?
14. What personal protective equipment (PPE) did your supervisor give you to wear?
    a. Was a respirator required to be worn (label, regulation, company policy?)
    b. How long were you wearing a respirator?
    c. How often or when do you change the filters (cartridges) or respirator?
15. What PPE were you wearing?
16. What did you do after you were exposed to the pesticide?
17. Did you notify anyone of the exposure? Who?
18. Did you feel sick? If yes:
    a. When did you start feeling sick?
    b. What were your symptoms?
    c. How long did you have symptoms?
19. Did you go to a doctor or hospital? If yes: :
    a. Who took you to the doctor or hospital?
    b. Did you drive yourself to the doctor or hospital?
    c. When did you see a doctor?
    d. What treatment did you receive?
    e. Were you hospitalized? If yes, how long?
20. How many days of work did you miss?
21. Were you eating, drinking, or smoking at any time while you were handling pesticides?

22. Did you feel sick before coming to work? If yes, explain.
23. What were the weather conditions at the time of exposure? Did they change during the application?
24. Was anyone else working with you? Were they exposed and did they feel sick? If yes, obtain names so they can be interviewed.
25. Who maintains the PPE? How often is it inspected or repaired?
26. Are clean coveralls provided and worn every day?
27. Did you have access to soap, water (including for emergency eye flushing), and disposable towels at the work site? If so, how far away was it?
28. How often do you use the wash facilities? Did you use the wash facilities after the exposure?
29. Can you describe the pesticide training and instruction you have received?
30. Was the training specific to each pesticide you handle?
31. Did you review and sign your training records?
32. How often are you supervised?
33. Do you know where emergency medical care information is posted?
34. Do you know what medical supervision means? (If applicable)
35. Do you know where your employer maintains pesticide use records and safety information
36. (A-8, MSDS, application-specific information)?
37. Has anyone told you about applications nearby or about nearby fields under restricted entry interval? Who gave you that information?

Note: Obtain a 30-day work history from the employer's records.

b. Pesticide Handler -- Employer

Record the name of the interviewer, date, time, and location.

1. Identify the person, company name, address, telephone number, and type of license or certificate.
2. What are your responsibilities?
3. Who is responsible for the supervision of the employee(s)? Who directs them?
4. Were you notified of the employee(s') exposure? When? By whom?
5. What did you do after you were notified?
6. How did the exposure occur?
7. Where did the exposure occur?
8. When did the exposure occur?
9. What pesticide(s) was the employee handling at the time of exposure?
10. How many days of work were lost?
11. Did the employee receive medical care?
12. Was the employee hospitalized? If yes, how long?
13. How did the employee get to the medical care facility or hospital? Were they taken or did they drive themselves?
14. What personal protective equipment (PPE) was provided to the employee(s)?
15. How do you make sure that the employee(s) wears his/her PPE?
16. Describe your personal protective equipment maintenance program.
17. If required, describe your respiratory program.
18. How do you make sure that your application equipment is in good repair and safe to operate?
19. Do you provide a clean change area for your employee(s)?
20. Do you provide clean coveralls your employee(s) daily? Do they wear them?
21. Do you provide soap, water (including for emergency eye flushing), and disposable towels at the work site, where is it located?
22. Who trained the employee(s)?
23. Is the trainer qualified?
24. Describe your pesticide training program.
25. Describe your medical supervision program, who is the medical care provider? (If applicable)
26. Describe your hazard communication program (including display of application-specific information).
27. Describe your emergency medical care program.
28. What procedures do you follow if an employee(s) is exposed, ill, or injured?
29. What method do you use to provide information to employees about nearby applications and fields under restricted entry interval?

Notes: Reviewing training, respirator program, and medical records during the interview may cause distractions.

Close your interview with the employer before you begin your review of the documented training and medical supervision records.

Obtain a two-week work history from the employer's records.

c. Field Worker Exposed to Pesticide (Drift, Residue, Odor)

Record the name of the interviewer, and the date, time and location of the interview. The name, address, age, gender, telephone number, and work activity of the interviewee must also be recorded.

1. Who is your employer (the company/person who pays you)?
2. When did your exposure occur (time and date)?
3. What were your work activities the day you were exposed?
4. [Questions for employees exposed to drift from an application]
   a) Where did your exposure occur (you may want to have a site map/diagram with landmarks roads to help the employee determine where they were and where the application or source of exposure may have come from?
   b) Describe what was happening in the area around you.
   c) Did you notice an application of pesticides?
   d) When did you notice it (time and date)?
   e) Describe the application equipment -- airplane, helicopter, tractor, etc.
   f) How far were you from the application?
   g) When did you first experience contact with the pesticide?
   h) Did you smell any odors?
   i) When did you smell the odor?
   j) What did the odor smell like (how intense was it?)?
   k) How long did you smell the odor?
   l) When did you first experience contact with the pesticide? Describe what you smelled, saw, felt, and tasted during this experience.
   m) Did you have any symptoms?
   n) What were your symptoms?
   o) Were you notified that a nearby pesticide application would occur (if same operator)? Who notified you?
5. [Questions for employees exposed to residue in the field]
   a) What fields did you work in the day you were exposed?
   b) How did you get to the field(s)? (e.g., drove yourself or rode with another employee.)
   c) When did you enter the field?
   d) Where did you enter the field?
   e) Were you using any hand tools (hoe, pruners, etc.) during that activity?
   f) How long did you work in the field?
   g) Did you taste anything unusual? What did it taste like?
   h) Were any fields you worked in posted? Where were the signs located?
   i) Were there any signs posted in adjacent fields?
   j) Were you notified that the field had been treated with any pesticides?
   k) Did you enter any adjacent fields, i.e., to eat lunch? If yes, did you contact the foliage?
   l) Did you eat or drink anything unusual on the day when you first had the symptoms?
   m) Did you use water from the irrigation?
   n) Are you sensitive to any chemicals? If so, which ones?
6. Describe the weather conditions on that day.
7. When did you start feeling sick? Where were you located then?
8. What were your symptoms?
9. How long did you have the symptoms?
10. Did anyone else you were working with have symptoms? Who?

11. Have you felt these same symptoms before? When? How long were you sick during that incident?
12. Did anyone else in your household have the same symptoms?
13. What clothing and or personal protective equipment were you wearing?
14. Did you have access to soap, water, and disposable towels at the work site?
15. How often do you use the wash facilities? Did you use the wash facilities after the exposure?
16. Did you shower when you finished work that day?
17. Did you put on clean clothes when you finished work that day?
18. Did you tell your supervisor that you felt ill? When?
19. Did you go to the doctor or the hospital? When?
20. How did you get to the doctor or hospital?
21. Were you unable to return to work? If so, how many days did you miss?
22. Were you hospitalized? If yes, how long?
23. How many people are in your work crew?
24. Do you know if anyone else was exposed or had symptoms? If yes, obtain names so they can be interviewed. Did they see a doctor?
25. Can you describe the training you have received regarding working in fields treated with pesticides?
26. Who gave you the training? When?
27. Do you know where the property operator maintains pesticide use and safety information (A-9, MSDS, application-specific information)?
28. Has anyone told you about applications nearby or about nearby fields under a restricted entry interval? Who gave you that information?

Note: Obtain a two-week work history from the employer. A records inspection should be conducted to ensure compliance.

d. Private Citizen Exposed to Pesticide Drift or Odor

1. When did the exposure occur?
2. Where did the exposure occur?
3. Did you smell, see, taste, or feel anything unusual during or after exposure?
4. Did you smell any odors?
5. When did you smell the odor?
6. What did the odor smell like (how intense was it?)?
7. How long did you smell the odor?
8. Did you see any pesticide application taking place nearby?
9. Where did the application occur?
10. What was the distance between you and the application?
11. Describe the application equipment.
12. Describe the weather conditions on that day.
13. When did you start feeling sick?
14. What were your symptoms?
15. How long did your symptoms last?
16. Did you seek medical attention? Where? When?
17. Did you notify anyone of the problem? Who?
18. Do you know if anyone else was exposed?
19. Do you know if they sought medical attention?

e. Private Citizen Exposed to Pesticide Residue

1. When did the exposure occur?
2. Where did the exposure occur?
3. Was a pesticide application made on or near the property?
4. What pesticides were applied?
5. Who made the application?
6. When was it made?
7. Where was it made?
8. Did you smell or taste anything unusual?
9. When did you first notice the unusual smell or taste?
10. What did it smell or taste like?
11. When did you start feeling ill?
12. What were your symptoms?
13. How long did your symptoms last?
14. Did you seek medical attention? When? Where?
15. Do you know if anyone else was exposed?
16. Did you notify anyone of the problem? Who?

2. Suggested Interview Questions for Exposures and Illnesses – Spanish

a. Manipulador de Pesticidas - Empleado

Anote el nombre del entrevistador, día, hora y lugar. También necesita anotar el nombre, dirección, edad, género, número de teléfono, y actividad de trabajo del entrevistado.

1. Quién es su patrón (Quién paga a usted? Quién es su supervisor?)
2. Cuánto tiempo lleva trabajando como manipulador de pesticidas?
3. Quién le proporcionó su entrenamiento?
4. Cuándo fue su último entrenamiento?
5. En el momento de la exposición o cuando se enfermó, qué pesticida(s) estaba manipulando? Para los banderilleros: usted sabía qué pesticidas se estaban aplicando?]
6. Qué tipo de equipo de aplicación estaba usando?
7. [Para los banderilleros: Quién hizo la aplicación? Describa el tipo de avión que se usó.]
8. Se usaron controles de ingeniería (sistema cerrado, cabina cerrada)?
9. Cuándo ocurrió la exposición?
10. Dónde ocurrió la exposición?
11. Cómo ocurrió la exposición? Fue a través de la piel, inhalación, o por ingestión?
12. Se puso en contacto directo con el pesticida? Describa lo que sintió, degustó, vio, y olió durante ésta experiencia?
13. [Para los banderilleros: Cuál era su ubicación? Cuál era la distancia entre usted y el aplicador?]
14. Qué tipo de equipo de protección personal (PPE) le entregó su empleador para que usted usara?
    a. Era necesario usar un respirador (etiqueta, reglamento, política de la empresa)?
    b. Cuánto tiempo llevabas puesto un respirador?
    c. Con qué frecuencia o cuándo cambia los filtros (cartuchos) o el respirador?
15. Qué tipo de equipo de protección personal estaba usando?
16. Qué hizo después de sufrir la exposición a pesticida?
17. Dió aviso a alguien de la exposición? Quién?
18. Se sintió enfermo? Y si fue así:

a. Cuándo se empezó a sentir mal?
b. Cuáles fueron sus síntomas?
c. Cuánto tiempo le duraron los síntomas?

19. Fue al doctor o a un hospital? Y si fue así:

d. Quién lo llevó al doctor o a un hospital?
e. Cuándo vió a un doctor?
f. Qué tratamiento recibió?
g. Fue hospitalizado? Por cuanto tiempo?

20. Cuántos días faltó al trabajo?
21. Estaba usted comiendo, fumando, o tomando mientras realizaba sus labores de trabajo?
22. Se sentía mal antes de salir a trabajar? Explique.
23. Cuál eran las condiciones del tiempo en el momento de la exposición? Cambiaron éstas durante la aplicación?
24. Había alguna otra persona trabajando con usted? Fueron expuestos al pesticida? Se sintieron mal? Si la respuesta es afirmativa obtenga los nombres para entrevistarlos.
25. Quién mantiene los PPE? Cada cuánto tiempo son inspeccionados o reparados?
26. Se les entrega overoles limpio todos los días? Se los pone usted todos los días?

27. Le proveen a usted jabón, agua (incluso para lavarse los ojos en caso de emergencia) y toallas desechables en el lugar de trabajo? Si es así, ¿qué tan lejos estaba?
28. Cada cuándo usa los servicios de baño o para lavarse? Los usó después de la exposición?
29. Describa el entrenamiento e instrucción de pesticida que usted ha recibido?
30. Quién le dió el entrenamiento?
31. Fué específico el entrenamiento para cada pesticida que usted maneja?
32. Usted revisó y firmó sus registro de entrenamiento?
33. Con qué frecuencia lo supervisan?
34. Usted sabe dónde se pone la información de emergencia médica?
35. Usted sabe qué significa la supervisión médica? (Si es aplicable)
36. Usted sabe dónde su empleador mantiene los registros e información de seguridad del uso de los pesticidas (A-8, MSDS, información específica sobre la aplicación) ?
37. Alguien le ha informado sobre las aplicaciones cercanas o acerca de campos cercanos bajo un intervalo de entrada restringida? Quién provee esa información?

Nota: Obtenga de los registros del empleador un historial de trabajo de treinta dias.

b. Manipulador de Pesticidas - Empleador

Anote el nombre del entrevistador, día, hora y lugar.

1. Identifique la persona, nombre de la compañía, número de teléfono, y clase de licencia certificado.
2. Cuáles son tus responsabilidades? Quién los dirige?
3. Quién es el responsable de la supervisión del empleado(s)?
4. Se le notificó a usted sobre la exposición del o de los empleado(s)? Cuándo? Quién lo hizo?
5. Qué hizo usted después que le notificaron?
6. Cómo ocurrió la exposición?
7. Dónde ocurrió la exposición?
8. Cuándo ocurrió la exposición?
9. Qué pesticida(s) estaba manipulando el empleado?
10. Cuántos días se perdieron de trabajo?
11. Recibió el empleado atención médica?
12. Hospitalizaron el empleado? Por cuánto tiempo?
13. Cómo llegó el empleado al centro de atención médica o al hospital? Fueron tomados o se manejaron ellos mismos?
14. Qué clase de equipo de protección personal (PPE) entregaron a o los empleado(s)?
15. Cómo se asegura usted que el empleado(s) use su PPE?
16. Describa su programa de la mantención del equipo de protección personal.
17. Si es necesario, describa su programa respiratorio.
18. Cómo se asegura que su equipo de aplicación de pesticida está en buenas condiciones y su operación no es peligrosa?
19. Le proporciona usted a sus empleado(s) un área limpia para cambiarse?
20. Se entrega al empleado overoles limpio diariamente? Usa el empleado esta ropa diariamente?
21. En el lugar de trabajo, provee usted jabón, agua (para las manos y los ojos) y toallas desechables para sus empleados, donde está localizado?
22. Quién entrenó al empleado(s)?
23. Está calificado el entrenador?
24. Describa su programa de entrenamiento de pesticidas?
25. Describa su programa de supervisión médica? Quién es el proveedor de atención médica? (Si corresponde)
26. Describa su programa de comunicación de peligro (incluyendo exhibición de información específica sobre la aplicación).
27. Describa su programa de cuidado de emergencia médica?
28. Que procedimientos sigue usted si un empleado se expone, se enferma o se lesiona?
29. Cómo informan a sus empleados sobre aplicaciones cercanas o en campos cercanos que están bajo un intervalo de entrada restringida?

Notas: Si durante la entrevista, usted revisa los registros de entrenamiento, programa de respirador y médicos, esto puede causar distracciones. Termine su entrevista con el empleador antes de comenzar su revisión de los registros de entrenamiento y de supervisión médica documentados.

Obtenga de los registros del empleador un historial de trabajo de treinta dias.

c. Trabajador del Campo Expuesto a Pesticida (por Deriva, Residuo, Olor)

Anote el nombre del entrevistador, día, hora y lugar de la entrevista. También se debe anotar el nombre, dirección, edad, género, número de teléfono, y actividad de trabajo del entrevistado.

1. Quién es su patrón (empleador/Quien se paga)?
2. Cuándo ocurrió la exposición (la hora y la fecha)?
3. Cuáles eran sus labores de trabajo el día que sufrió la exposición?
4. [Preguntas para empleados expuestos a una deriva de una aplicación.]
   a. Dónde ocurrió su exposición?
   b. Describa lo que estaba pasando a su alrededor. c. Notó si había una aplicación de pesticida?
   d. Cuándo lo notó (la hora y la fecha)?
   e. Describa el equipo de aplicación – avión, helicóptero, tractor, etc.
   f. A qué distancia se encontraba usted de la aplicación.
   g. Cuándo experimentó por primera vez contacto con el pesticida? Describa lo que olió, vió, sintió, y degustó durante ésta experiencia.
   h. Olías algún olor
   i. Cuándo oliste el olor?
   j. A qué olía el olor (qué tan intenso era?)?
   k. Cuánto tiempo has olido el olor?
   l. Le notificaron que ocurriría una aplicación de pesticidas en la cercanía (si el mismo operador)? Quién le comunicó?
   m. Tuvo algún síntoma?
   n. Cuáles fueron sus síntomas?
5. [Preguntas para empleados expuestos a residuo de pesticida en el campo.]
   a. En qué campos trabajó el día que sufrió la exposición?
   b. Cómo llegó al campo(s)? (por ejemplo, manejó usted mismo o con otro empleado.)
   c. Cuándo entró al campo?
   d. Por dónde entró al campo
   e. Usaba alguna herramienta de mano (azadón, podadora, etc.) durante esa actividad?
   f. Cuántas horas trabajó en el campo?
   g. Olió y degustó algo diferente? Cómo olía o degustaba?
   h. Algunos de los campos dónde usted estaba trabajando tenían letreros (avisos)? Dónde estaban colocados los letreros?
   i. Habían letreros en los terrenos adyacentes?
   j. Le notificaron que habían aplicado pesticidas en el campo dónde usted estaba trabajando?
   k. Entró en algún terreno adyacente, por ejemplo, a comer? Si es afirmativo, contactó el follaje?
   l. Comió o tomó algo fuera de lo común ese día cuándo tuvo los síntomas por primera vez?
   m. Tomó agua de las llaves de riego?
   n. Es sensible a algún producto químico? A cuáles?
6. Describa las condiciones del tiempo ese día.
7. Cuándo se empezó a sentir mal? Dónde se encontraba en esos momentos?
8. Cuáles fueron sus síntomas?
9. Cuánto tiempo le duraron los síntomas?
10. Alguna otra persona con la que estaba trabajando tenía síntomas? ¿Quien?
11. Había sentido los mismos síntomas anteriormente? Cuándo? Cuánto tiempo estuvo enfermo esa vez?

12. Alguien más en su casa tuvo los mismos síntomas?
13. Que ropa o tipo de equipo de protección personal estaba usando?
14. Usted tenía acceso a jabón, agua y toallas desechables en el lugar de trabajo?
15. Cada cuando se usa los servicios de baño o para lavarse? Las usó después de la exposición?
16. Se duchó (lavarse el cuerpo entero con la regadera) ese día al terminar su trabajo?
17. Se vistió con ropa limpia cuándo terminó su trabajo ese día?
18. Le dijo a su supervisor que se sentía mal? Cuándo?
19. Fué al doctor o a un hospital? Cuándo?
20. Cómo llegó al doctor o a un hospital?
20. Pudo ir a trabajar? Si no fue a trabajar, cuántos días perdió de trabajar.
21. Fué hospitalizado? Por cuánto tiempo?
22. Cuántas personas hay en su cuadrilla?
23. Había otras personas trabajando cerca de usted que fueron expuestos al pesticida o tuvieron síntomas? Si la respuesta es afirmativa obtenga los nombres para entrevistarlos. Vieron a un doctor?
24. Usted puede describir el entrenamiento que ha recibido con respecto al trabajo en los campos tratados con pesticidas?
25. Quien le dió el entrenamiento? Cuándo?
26. Usted sabe dónde el operador de la propiedad mantiene los registros y la información de seguridad del uso de los pesticidas (A-9, MSDS, información específica sobre la aplicación)?
27. Alguien le ha informado sobre otras aplicaciones cercanas o acerca de campos cercanos bajo un intervalo de entrada restringida? Quién le entrego esa información?

Nota: Obtenga del empleador un historial de trabajo de treinta dias.

d. Público Expuesto a Deriva de Pesticida o Olor

1. Cuándo ocurrió la exposición?
2. Dónde ocurrió la exposición?
3. Usted olió, vio, degustó o sintió algo diferente durante o después de la exposición?
4. ¿Olías algún olor?
5. ¿Cuándo oliste el olor?
6. ¿A qué olía el olor (qué tan intenso era?)?
7. ¿Cuánto tiempo has olido el olor?
8. Qué olor, sabor, o sensación tenía?
9. Notó si había cerca una aplicación de pesticida?
10. Dónde se estaba haciendo la aplicación de pesticida?
11. A qué distancia se encontraba usted de la aplicación?
12. Describa el equipo de aplicación?
13. Describa las condiciones del tiempo ese día.
14. Cuándo se empezó a sentir enfermo?
15. Cuáles fueron sus síntomas?
16. Cuánto tiempo le duraron los síntomas?
17. Pidió atención médica? Dónde? Cuándo?
18. Notificó a alguien de su problema? Quién?
19. Usted sabe si alguien más fue expuesto?
20. Usted sabe si pidieron atención médica?

e. Público Expuesto a Residuo de Pesticida,

1. Cuándo ocurrió la exposición?
2. Dónde ocurrió la exposición?
3. Estaban haciendo una aplicación de pesticida en o cerca de la propiedad?
4. Qué pesticidas estaban aplicando?
5. Quién hizo la aplicación?
6. Cuándo la hicieron?
7. Dónde la hicieron?
8. Usted olió o degustó algo diferente?
9. Cuándo notó por primera vez un olor o sabor diferente?
10. Qué olor o sabor tenía?
11. Cuándo se empezó a sentir enfermo?
12. Cuáles fueron sus síntomas?
13. Cuánto tiempo le duraron los síntomas?
14. Pidió atención médica? Dónde? Cuándo?
15. Usted sabe si alguien más fue expuesto?
16. Notificó a alguien del problema? Quién?

Appendix F

Public Exposure Incidents Involving Large Numbers of People

DPR and CAC Responsibilities

Introduction

Pursuant to FAC sections 2281 and 12977, CACs have the responsibility and authority to investigate incidents that may involve potential or actual human illness or injury, property damage, loss, or contamination, and fish or wildlife kills alleged to be the result of the use or presence of a pesticide. DPR relies upon the CAC to provide sound, factual information and is available to assist the CAC during any investigation.

A non-occupational pesticide use-related exposure event (hereafter referred to as "episode") is any episode related to pesticide application activities that results in exposure to a person while they are not working. The CAC is responsible for responding to all such incidents, including incidents in which exposed persons do not seek medical treatment. This document is intended to provide guidance for CACs when incidents occur involving large numbers of affected people. In recent years, these incidents have often involved off-site movement of fumigants.

Branches within DPR have different objectives in conducting investigations. While the Enforcement Branch focuses on collecting evidence that may document violations, WH&S uses investigation information to evaluate the circumstances of exposure, determine whether unsafe use conditions exist, and implement appropriate mitigation measures. In order to accomplish this objective, WH&S frequently needs exposure information for persons affected and a list of symptoms experienced by each person, whether or not they sought medical treatment

Advisory on emergency response

This document is not intended to supersede local emergency response planning. Significant guidance exists regarding response to incidents where emergency responders such as fire department personnel are likely to have primary responsibility. CACs should be involved in their county's emergency planning group to provide their input and keep abreast of local protocols.

CAC episode response

The CAC should develop and implement a response plan specific to each incident. The response plan should include the following five components:

- Initial response
- Pre-investigation planning
- Investigation
- Mitigation
- Follow-up

Initial Response

The CAC conducts an Initial Response to quickly get a "thumbnail sketch" of the nature and scope of the incident and to notify appropriate agencies:

- Locate the treated field(s) that may be the source of the incident.
- Identify the pesticide(s) involved.
- Identify the grower and/or pest control business that treated the field(s).
- Considering local environmental conditions, take steps to prevent or limit additional exposures.
- Notify DPR's EBL and/or regional office when it is determined that the incident involves a pesticide. The EBL/regional office is responsible for notifying DPR headquarters as appropriate.
- Notify WH&S at (916) 445-4222 if the incident meets WH&S annual priorities for investigation.
- Decide whether response agencies should be notified, such as the lead agency per county emergency response plan, local health officer, etc.
- Conduct representative interviews to characterize the number of persons affected and the types of symptoms they are experiencing. (See page 98 of this document for general guidance on conducting gradient interviews and page 103 for the Pesticide Episode Investigation Non-Occupational Exposure Supplemental.) Initially, it is not necessary to interview every person potentially exposed. Conduct gradient interviews only until you have an understanding of approximately how many people are affected, how severely, and over how wide an area.
- Some incidents may be larger than the CAC can respond to on their own or may meet local criteria for notifying emergency responders. If so, follow your local county emergency plan and notify appropriate agencies such as County Environmental Health. The CAC can provide technical assistance to emergency responders such as information about the hazards involved. Consult with DPR staff as needed.

Pre-investigation planning

The CAC conducts pre-investigation planning to set the immediate direction and priorities for the investigation and to identify the resources and methods required to implement the strategy. The CAC generally conducts planning among their staff either in person or by phone. Pre-investigation planning may include DPR staff if appropriate. An important component is determining the information and resources exposed persons require in both the short-term and long-term (see Follow-up section). CACs should:

- Discuss what is known and who is already involved (fire, medical, media, etc.).
- Use guidance from Enforcement Branch Manuals, CAC letters, ENF/WH&S letters, current policies, etc., to plan the investigation.
- Develop the response and investigation strategy to achieve current objectives:
  - Designate CAC staff as investigation team members and a lead investigator who will write the report. Determine how often and in what form the investigation team will provide status updates to CAC headquarters.
  - Determine the type and number of samples that should be collected, if applicable, to document exposures and/or support violations.
  - Determine the records and other documentation that should be collected.
  - How will the CAC identify the exposed population, notify potentially exposed persons of the incident, and provide them with status updates? Options include public meetings, surveys and interviews. Suitable tools may include using door hanger questionnaires, central distribution points, or public meetings.
  - If interviews are opted for, how will they be conducted (gradient or other strategy)? Who will be interviewed? Where will interviews be conducted? Is bilingual expertise needed? Does CAC staff have appropriate questionnaire templates or do they need to develop additional survey tools? (See the enclosed Non-Occupational Pesticide Exposure Episode Questionnaire.)
  - What information do the exposed persons need to know in the immediate and longer term? Will the CAC distribute an information packet? What will it contain? DPR may have fact sheets and other similar resources.
  - Diagram the incident site and adjacent fields or properties with distances.

Pre-investigation planning (continued)

- Determine staff and material resources needed to conduct the investigation, such as:
  - Additional supplies
  - DPR headquarters, regional office, or staff from other agencies to provide technical expertise or assistance with media inquiries, sampling activities, notifying affected persons and/or conducting interviews.
  - An information packet to distribute to exposed persons (letter, fact sheets, questionnaires, etc.)
  - California Department of Food and Agriculture Laboratory resources and contacts

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Investigation

The CAC implements the pre-investigation plan by conducting investigation activities to determine how the incident occurred and to characterize the magnitude of the incident (geographic extent, the number of persons exposed, and the severity of their exposures). Where the initial response provided a "thumbnail sketch" of the incident's magnitude, the goal of the investigation phase is to have more exact information on who was affected and how severely:

- Mobilize the investigation team to investigate on-site.
- Conduct the investigation activities, adjusting the plan as needed to accommodate new information or developments.
- Collect samples and other information to document the incident and to support possible violations.
- Gather information via interviews and questionnaires. Interview more intensively where people have severe symptoms, such as vomiting, and less extensively where symptoms are less severe, such as transient irritation. For example, if symptoms are severe near the incident site, interview all persons living nearby. Where symptoms are milder a few streets away, interview fewer people.
- Investigation team members should provide one another and CAC headquarters with periodic status updates. Considering what is known and unknown, review the overall objectives and modify the investigation plan as needed.

Mitigation

Mitigation is conducted in response to pesticide safety issues found during an investigation and may consist of protective measures in the form of administrative, regulatory, engineering, or other controls. Depending upon the nature of the incident, a mitigation measure may be imposed immediately or may be developed over a longer period of time. Protective measures may include stopping a pesticide application, requiring additional water seals or soil layering, evacuating the area, increasing buffer zones, or changing permit conditions. These may be developed by the CAC and/or DPR.

Follow-up

Follow-up is conducted to relay information to exposed persons according to their needs for both the immediate and long term. DPR can provide technical and other assistance; other assistance may be available from state and local agencies such as environmental health or state health. Exposed persons want to know what happened and what the CAC knows. A form letter, fact sheet, or other handout material can summarize this information and address their concerns. Consider the following in developing appropriate strategies:

- Provide information on what the CAC is doing or has done to follow up. If the investigation is ongoing, the CAC can report what efforts are underway, such as identifying the pesticide(s) involved, collecting samples, checking records, and conducting interviews.
- Inform residents how they can provide their input into the investigation, via meetings, surveys, interviews, etc.
- Provide information on how, when and where the CAC will communicate with them about the incident and the status of the investigation, e.g., at a public meeting, via final report, etc.
- If a public meeting is planned, explain who will be there (doctor, DPR, Spanish translators, media, etc.).
- If applicable, the CAC may need to provide information on mitigation Measures that we adopted in response to the public episode.

Conducting gradient interviews

This guidance on conducting gradient interviews presumes a neighborhood of single-family homes. Interview strategies will be tailored to each incident site, as these vary widely from residential to mixed use, and encompass retail sites, apartments, offices, schools, fields, etc.

Gradient interviews are a tool to characterize the magnitude of an incident. They consist of representative interviews of potentially exposed persons along a gradient beginning with the area nearest the exposure source and considering local environmental conditions such as wind direction, continuing along the presumed exposure path(s). The goal is to produce a two-dimensional diagram showing the locations affected, the approximate number of exposed persons in each area, and the distribution of exposure symptoms by severity within the incident area. You should use the Non-Occupational Pesticide Exposure Episode Questionnaire to capture interview responses.

Gradient interviews are conducted first as part of the initial response so the CAC can rapidly characterize the incident. If symptoms are not severe, initial interviews consist of "spot sample interviews," described below. For incidents involving severe symptoms, many people, or large areas, the CAC may subsequently conduct intensive gradient interviews, such as door-to-door interviews as part of their full-scale investigation.

Begin by interviewing households immediately adjacent to the incident site. Ascertain whether residents were home at the time of the incident and ask them to describe any symptoms they experienced. If persons report severe symptoms, such as nausea and vomiting, you should begin conducting house-to-house interviews. Interview residents until the reported symptoms are of a less severe nature, such as mild coughing, sore or scratchy throat, watering eyes, or headache. At this point begin "spot sample" interviewing of residents in several houses on either side of the sector where the more severe symptoms were experienced until exposed residents of homes report that they did not experience symptoms. If persons adjacent to the incident site report that symptoms were relatively minor, then the interview process can consist solely of "spot sample" interviews.

Continue interviewing outward from the incident site along the presumed exposure path(s), based on local environmental conditions. Conduct "spot interviews" or house-to-house interviews, as indicated by the severity of the symptoms reported. Once residents begin to report less severe symptoms, conduct "spot sample" interviews at every few houses until interviews indicate that exposed persons experienced no symptoms. Depending on local environmental conditions, the exposure gradient may extend in several geographic directions. The interview plan should characterize the width and depth of each geographic direction. Plot the general outline of the incident area and estimate how many persons were potentially exposed. Indicate the distribution of symptoms by severity within the incident area. This information is generally sufficient for the CAC to establish investigational objectives during their pre-investigation planning. You can also use the sketch to develop a more intensive interviewing strategy.

Enclosures

Introduction

The following explains how to use the enclosed Non-Occupational Pesticide Exposure Episode Questionnaire and the Pesticide Episode Investigation Non-Occupational Exposure Supplemental. Both forms can be printed or copied onto single sheets as two-sided forms. DPR developed these forms as tools to collect and track exposure information from persons affected in episodes. If used in your investigation, return a copy to WH&S. WH&S wants your feedback on how well they work for you and any suggestions you have to facilitate capturing exposure information.

Non-Occupational Pesticide Exposure Episode Questionnaire

CAC staff may use this questionnaire to inform potentially exposed persons about an incident and to provide them an opportunity to report exposure information. The questionnaire can be used as a door hanger or made available at public meetings or central distribution points. The CAC can use the information on returned questionnaires to locate persons they may wish to interview more extensively.

Page 1 of the questionnaire was designed as a template and can be used "as is" or as guidance in developing your own page 1. Please feel free to customize page 1 as needed for each incident to accommodate your letterhead, the episode date, the pesticide involved, staff contacts, or provide more information about the incident and your investigation. The CAC may translate the entire document into other languages as needed. The table on page 2 contains fields to capture exposure information of interest to WH&S. Please do not make changes to this table, other than to translate into suitable languages.

Pesticide Episode Investigation Non-Occupational Exposure Supplemental

DPR requests that CAC staff use this report to collect information during interviews after an incident. The standardized format will allow WH&S to track incident data more effectively and WH&S hopes it provides a more efficient and user-friendly way to capture exposure information than do current formats. Fill out all applicable fields as completely as possible. Please do not modify the form. We welcome your feedback on the design, format, or other attributes and will update the form periodically to incorporate your suggestions.

Pesticide Exposure Episode
Questionnaire–example
(on county letterhead)

Dear Resident,

A pesticide incident occurred in your neighborhood on _____at about _____AM PM. The County Agricultural Commissioner's Office is investigating the incident. If you wish to report illness symptoms that you or members of your household experienced related to this incident, please complete this questionnaire and send or drop it off at our office:

_____

_____

_____

If you have questions, call _____ at _____

If members of your household visited a doctor concerning their symptoms, please provide the doctor's name, address and phone number, with area code, below:

Doctor _____ Phone Number (_____)_____

Address _____

Pesticide Exposure Episode Questionnaire
(on county letterhead)

Name	Phone number ( )
Address	Date

Describe what happened on the day of the incident. Describe the time of day, where you were, what you saw, heard, felt, tasted, and smelled.

What time did symptoms begin? _____ AM PM	Is anyone in your household still experiencing symptoms? (Circle one) YES NO

Please list the names, gender, and age of every person who experienced symptoms, including yourself. Check those symptoms experienced by each person. Use page 2 if needed. **If anyone saw a doctor, please put a "✓" next to their name in column 1.**

No.	✓	Name	Gender (M/F)	Age	Check Symptoms
1					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER
2					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER
3					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER
4					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER
5					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER
6					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER
7					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER
8					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER
9					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER
10					☐EYES BURN/TEAR ☐NOSE IRRITATED ☐COUGH ☐SORE THROAT ☐SHORT BREATH ☐RASH/ITCH ☐HEADACHE ☐DIZZY ☐ODOR ☐VOMIT/NAUSEA ☐OTHER

STATE OF CALIFORNIA

DEPARTMENT OF PESTICIDE REGULATION
ENFORCEMENT BRANCH

PESTICIDE EPISODE INVESTIGATION
NON-OCCUPATIONAL EXPOSURE SUPPLEMENT

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(AS APPLICABLE) PRIORITY NO. _____

NAME OF INTERVIEWEE	ADDRESS	CITY	ZIP CODE
TELEPHONE NUMBER WITH AREA CODE ( )	COUNTY	DATE OF EXPOSURE	TIME OCCURRED AM PM
EXPOSURE SITE ☐ HOUSE ☐ APT. ☐ SCHOOL ☐ VEHICLE: TYPE_____ ☐ RETAIL ☐ OPEN AREA ☐ OTHER _____		NUMBER EXPOSED OUTDOORS _____ NUMBER EXPOSED INDOORS _____	IS EXPOSURE ONGOING? ☐ YES ☐ NO

DID ANYONE SEE A DOCTOR? ☐ YES ☐ NO	HOW MANY SAW A DOCTOR?	NAME OF DOCTOR/MEDICAL FACILITY	
ADDRESS OF DOCTOR/MEDICAL FACILITY		CITY	TELEPHONE NUMBER ( )
DATE(S) PERSONS SAW A DOCTOR	WAS ANYONE HOSPITALIZED? ☐ YES ☐ NO	IF "YES", HOW MANY PERSONS?	IF "YES", HOW LONG (DAYS)?

LOCATION OF EXPOSURE - BE SPECIFIC. USE PAGE 2 IF NEEDED. ATTACH A MAP, IF DESIRED

DESCRIBE HOW EXPOSURE OCCURRED: INCLUDE ACTIVITIES, WHAT HAPPENENED, WHAT EXPOSED PERSONS SAW, HEARD, SMELLED, TASTED AND FELT. USE PAGE 2 IF NEEDED.

NAME OF PERSONS EXPOSED (CONTINUE LIST ON PAGE 2 IF NECESSARY)	GENDER (M/F)	DATE OF BIRTH (OR AGE)	SYMPTOMS EXPERIENCED	STILL HAVE SYMPTOMS?
(SPACE 1 IS FOR PERSON BEING INTERVIEWED) 1			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
2			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
3			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
4			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
5			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
6			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
7			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
8			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO

PESTICIDE ALLEGEDLY INVOLVED	REGISTRATION NUMBER FROM LABEL	COMMODITY/SITE TREATED
PERSON/FIRM ALLEGEDLY RESPONSIBLE	OWNER OR OPERATOR OF PROPERTY TREATED	

INVESTIGATOR'S NAME (PRINT)	INVESTIGATOR'S SIGNATURE	TITLE	DATE

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ADDITIONAL NAMES OF PERSONS EXPOSED	GENDER (M/F)	DATE OF BIRTH (OR AGE)	LIST SYMPTOMS EXPERIENCED: DRAW ARROW DOWN THROUGH ALL ENTRIES WITH IDENTICAL SMPTOMS OR WRITE "SAME AS ABOVE"	HAVE SYMPTOMS RESOLVED?
9			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
10			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
11			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
12			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
13			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
14			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO
15			☐ EYES BURN/TEAR ☐ NOSE IRRITATION ☐ COUGH ☐ DIZZY ☐ SORE THROAT ☐ SHORT BREATH ☐ RASH/ITCH ☐ ODOR ☐ HEADACHE ☐ VOMIT/NAUSEA ☐ OTHER	☐ YES ☐ NO

ADDITIONAL DESCRIPTION OF HOW EXPOSURE OCCURRED

SUMMARY OF EXPOSURE EPISODE

PLOT MAP

Appendix G

EBL Report on Restricted Materials Used During a Priority Episode

The DPR EBL assigned to the county responsible for each Priority Episode investigation that involves a restricted material is expected to complete a report that responds to each of the following issues (registration, labeling, permit, NOI, pre-application site evaluation, recommendation, and certification). This report will be forwarded to headquarters via the RO supervisor and placed in the investigative file folder for that incident.

1. What is the registration status of the restricted materials(s) used?

2. Is the restricted material use clearly within the scope of the label?

3. Do you have a recommendation that could improve the clarity of the label?

4. Was there a valid permit for this restricted material, for this site?

5. Are there any DPR recommended permit conditions issued for this restricted material?

6. Could additional permit conditions have avoided this incident?

7. Are there recommendations for the county regarding permit issuance?

8. Was a Notice of Intent properly submitted and evaluated for this application?

9. Did the county conduct a pre-application site evaluation?

10. Did the recommendation document alternatives and mitigation measures?

11. What type of certification did the supervisor of this application hold?

12. Was the most likely cause of this incident t process related or applicator error?

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VII. Associated Forms - The following links are to the electronic version of each form:

PR-ENF-008: Report of Loss, Nonperformance or Damage.
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf008.pdf

PR-ENF-030: Sample Analysis Report/Sample Analysis Report Evidence Record PR-ENF-030: Sample Analysis Report Evidence Record
http://www.cdpr.ca.gov/docs/enforce/prenffrm/dpr-enf-030.pdf

DPR-ENF-071: Clothing Release Form
http://www.cdpr.ca.gov/docs/enforce/prenffrm/dpr071.pdf

PR-ENF-074: Complaint Of Human Exposure or Unsafe Condition
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf074.pdf

PR-ENF-097: Pesticide Illness Investigation Request for Time Extension
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf097.pdf

PR-ENF-100A: Statement
https://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf100a.pdf

PR-ENF-127: Pesticide Episode Investigation Report
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf127.pdf

PR-ENF-127A: Pesticide Episode Investigation Supplemental Report
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf127a.pdf

PR-ENF-127B: Episode Witness/Injured/Complainant Report
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf127b.pdf

PR-ENF-127C: Episode Site Diagram
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf127c.pdf

PR-ENF-127D: Field Worker Dermatitis Supplemental Report
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf127d.pdf

PR-ENF-130: Photo Mount
https://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf130.pdf

PR-ENF-133: Medical Information Authorization
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf133.pdf

PR-ENF-133X: Autorización de Información Médica
http://www.cdpr.ca.gov/docs/enforce/prenffrm/prenf133x.pdf