



Enforcement Branch



CACASA

Pesticide/Wildlife Incident Response Plan Training Workbook

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ACKNOWLEDGMENTS

This Pesticide/Wildlife Incident Response Plan Training Workbook was developed by a working group of representatives from the Department of Fish and Game (DFG), the Department of Pesticide Regulation (DPR) Enforcement Branch, and the California Agricultural Commissioners and Sealers Association (CACASA) for Fish and Game Wardens, County Agricultural Biologists and DPR Enforcement Branch Liaison (EBL) staff

PESTICIDE/WILDLIFE INCIDENT RESPONSE PLAN TRAINING WORKBOOK

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Introduction

This Pesticide/Wildlife Incident Response Plan (PWIRP) training was developed in accordance with the Memorandum of Understanding (MOU) between the Department of Fish and Game (DFG), the California Agricultural Commissioners and Sealers Association (CACASA), and the Department of Pesticide Regulation (DPR) to implement a plan describing in detail procedures for dealing with pesticide related incidents involving injury/death to fish and wildlife resources.

The training includes a copy of the PWIRP, this workbook, and a presentation, to prepare field staff to handle incidents described above, according to communication, and notification protocols established between the three parties above.

Objectives

The purpose of PWIRP training is to help understand and define the roles, responsibilities and response levels of County Agricultural Biologists (Biologists), DPR's EBL, and Fish and Game investigators-Wardens when investigating pesticide related injuries or deaths to wildlife.

At the completion of this training you will:

- 1-Know who the Biologist(s)/EBL (s) /Warden (s) assigned to your area and procedures for contacting them.
- 2-Know your role/responsibilities and your counterparts in the sister agencies.
- 3-Know the content of the MOU between the 3 parties.
- 4-Learn the notification procedure, available resources, and be aware of any established communication, notification, and sampling protocols between the 3 parties when investigating incidents involving injury/death to fish or wildlife.

Authority

County Agricultural Biologists and EBL (s) authority to investigate pesticide related incidents involving fish and game:

Sections 11501.5, 12977, 12982, 14004, and 15201 of the California Food and Agricultural Code (FAC) specifies that the County Agricultural Commissioners (CAC) enforce the pesticide use enforcement program under the direction and supervision of the California Department of Pesticide Regulation (DPR).

FAC section 2281 outlines the responsibilities of each party in joint programs.

Section 11454 specifies that DPR is the successor to CDFA in enforcing pesticide laws and regulations.

Title 3, California Code of Regulations (3CCR) sections 6140 and 6141 specify that DPR or the CAC may at any reasonable time, enter and inspect, interview employees and/or sample items in order to determine compliance.

Furthermore, DPR and the CACs have responsibility and authority to investigate episodes that may involve potential environmental effects alleged to be the result of the use or presence of a pesticide (*FAC sections 408, 11501.5, 12977 and 12982*)

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is the federal act, which enables the state legislation. This act covers all pesticides including herbicides, which are not named in the title. The corresponding regulations may be found in the Code of Federal Regulations, Title 40, parts 150-189 (CFR 40).

Regulatory websites:

FAC:

<http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=fac&codebody=&hits=20>

3CCR:

http://www.cdpr.ca.gov/docs/inhouse/calcode/chapter_.htm

CFR 40, Section 152.3(s) definition of pesticide:

Pesticide means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that is a new animal drug*, or is an animal feed*.

DFG is the lead agency for protecting, conserving, and perpetuating fish and wildlife resources in California. Fish and Game Wardens Mission Statement reads,

"To protect and manage all fish, wildlife and plant resources, the habitats upon which they

depend, for their ecological values and for their use and enjoyment by the public both now and in the future”.

They get their authority to investigate pesticide related incidents involving fish and game from two codes:

- 1) The California Fish and Game Code (F&GC) - for overall authority involving fish and wildlife available at <http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=fgc&codebody=&hits=20>
- 2) Title 14 of the California Code of Regulations (22CCR) - for details pertaining to that authority available at <http://www.dfg.ca.gov/ospr/law/regs/volumne.pdf>

Fish and Game Code Sections 1301, 1600, 1700, 1802, 1900, 2000 and 2701 list specific authorities and policies associated with the management of fish, wildlife, and plant resources, including threatened and endangered species.

Wardens also work with the following codes: Penal, Water, Harbors and Navigation, Government, and Health and Safety. There are several federal acts such as the Migratory Bird Act and the Endangered Species Act, which govern fish and game issues.

Central Laws

A comprehensive study of each agency's laws is not possible here. There are, however, some basic concepts that we can share. These are DPR's Conflict with the pesticide label and F&G's "Unlawful to Take" and "Water Pollution".

FAC, Section 12973 "Conflict with the label"

The use of any pesticide shall not conflict with labeling registered pursuant to this chapter, which is delivered with the pesticide or with any additional limitations applicable to the conditions of any permit issued by the director or commissioner.

In other words, the pesticide label instructions carry the weight of law.

F&GC, Section 2000 "Unlawful to Take"

It is unlawful to take any bird, mammal, fish, reptile or amphibian except as provided in this code or regulations made pursuant thereto. Possession of a bird, mammal, fish or reptile or parts thereof in or on the fields, forests, or waters of this state, or while returning therefrom with fishing or hunting equipment is prima facie evidence the possessor took the bird, mammal, fish or reptile or parts thereof.

The definition of "take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill. The concept of "taking" includes killing with a pesticide even though the victim is not removed or physically "taken".

F&GC, Section 5650 "Water Pollution"

Water Pollution; prohibition.

a)...it is unlawful to deposit in, permit to pass into, or place where it can pass into the waters of this state any of the following:

6) Any substance or material deleterious to fish, plant life, bird life, or mammals,

This F&GC section prohibits polluting "waters of the state" with pesticides.

Where We Converge

DFG, DPR and the County Agricultural Commissioner (CAC) staff are involved when pesticides are suspected as the cause of environmental pollution, fish and wildlife injury, or death. There is a Memorandum of Understanding between these three parties designating the role and responsibilities of each. (See the Pesticide/Wildlife Incident Response Plan).

Representatives from the three parties above participate on Environmental Task Forces, which meet periodically to discuss and review various environmental cases

DFG, DPR and CAC staff all face increasing numbers of pesticide related incidents, fish and wildlife injury, or death due to the expansion of agricultural/urban interface issues.

Where We Diverge

All three groups are involved in environmental protection and conducting comprehensive regulatory programs. Though each agency has a different approach when taking enforcement action and imposing fines

Fish and Game Wardens are peace officers who also look for criminal activity, and prepare cases; which usually go to the local District Attorney (D.A.) for criminal or civil prosecution. DFG has the authority to recover clean-up costs for environmental pollution.

Fish and Game Biologists/Environmental Scientists are considered public officers. They provide scientific expertise to wardens.

County Agricultural Biologists/DPR EBL (s) are considered public officers. They handle complaints, and investigate pesticide-related incidents. The CAC staff typically seeks enforcement through administrative civil penalty actions; though they may refer more serious cases to their District Attorney, or to DPR, which can either take the case or refer it to the Attorney General.

Agencies - State

DPR' EBL (s) has oversight and responsibility for training CAC staff about pesticide use enforcement and assisting them in conducting very complex and difficult inspections and investigation to assure statewide effectiveness. CAC staff also work closely with the California Department of Food and Agriculture (CDFA) staff in conducting other mandates. DPR takes licensing and certification violations to the Attorney General for prosecution. Issues of environmental contamination by chemicals other than pesticides are referred to the appropriate department/board in the California Environmental Protection Agency (Cal EPA).

These departments/boards and their local agencies are:

- 1) Department of Toxic Substance Control (DTSC): <http://www.dtsc.ca.gov/>
- 2) Air Resources Board (ARB), and Local Air Pollution Control Districts:
<http://www.arb.ca.gov>
- 3) State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards: <http://www.swrcb.ca.gov/>
- 4) California Integrated Waste Management Board (CIWMB), and Local Enforcement Agencies: <http://www.ciwmb.ca.gov/>
- 5) Office of Environmental Health Hazard Assessment (OEHHA): <http://www.oehha.ca.gov/>

DFG Wardens cooperate closely with the Regional Water Quality Control Boards, various Environmental Task Forces and the following state agencies:

- 1) Attorney General (AG)
- 2) California Department of Forestry (CDF)
- 3) Office of Emergency Services (OES)

Agencies - Federal

CAC staff work with federal agencies through the DPR EBL. These agencies typically are:

- 1) US Environmental Protection Agency (US EPA)
- 2) US Department of Agriculture (USDA)
- 3) US Food and Drug Administration (US FDA)

DFG Wardens work with the above agencies as well as other federal agencies:

- 1) US Department of the Interior - Fish and Wildlife Service (FWS)
- 2) Army Corps of Engineers (ACE)
- 3) US Coast Guard (USCG)
- 4) Federal Bureau of Investigations (FBI)
- 5) National Oceanic and Atmospheric Agency (NOAA)
- 6) National Marine Fisheries Services (NMFS)
- 7) US Geological Service - Biological Resources Division (USGS)

Memorandum of Understanding (MOU):

The Department of Fish and Game, the Department of Pesticide Regulation and the California Agricultural Commissioners and Sealers Association have a Memorandum of Understanding (MOU) outlining their roles and responsibilities. The three parties agreed to mutual notification and communication of pesticide incidents involving fish and wildlife injury or death. They agreed to promote both technical and policy consultations through the following groups: the Pesticide Registration and Evaluation Committee (PREC), and the Endangered Species Advisory Group. Consultation is a requirement of FAC, Section 14103.

The parties agreed to develop an implementation plan to describe procedures to carry out specific sections of the Memorandum of Understanding. The MOU was signed off in May 2000.

For purposes of enforcing F&GC, Section 5650, the use of a pesticide, as defined in FAC, Section 12753, will not be considered deleterious to fish, plant life, mammals or bird life provided that the pesticide is used in full compliance with labeling and existing pesticide laws and regulations.

For more principles and agreement between the 3 agencies, please refer to page # 2, 3 of the MOU.

Contacts

Note* the contact list of Agricultural Commissioners can be found in the **Pesticide/Wildlife Incident Response Plan. Also available at http://www.cdffa.ca.gov/exec/county/county_contacts.html**

DEPARTMENT OF PESTICIDE REGULATION

Enforcement Branch (Headquarters)

Northern Regional Office

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Sacramento, CA 95812-4015

(916) 324-4100

FAX: (916) 445-7083

Central Regional Office

1130 E. Shaw Avenue, Suite 100

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Phone: (559) 243-8111

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Southern Regional Office

30 Chaparral Court, #130

Anaheim, CA 92808

Phone: (714) 279-7690

Fax: (714) 279-7692

DEPARTMENT OF FISH AND GAME

Headquarters

1416 Ninth Street, 12th floor
Sacramento, CA 95814
Phone: (916) 653-7664
Fax: (916) 653-1856

Pesticide Investigations Unit

1701 Nimbus Rd., Suite F
Rancho Cordova, CA 95670
Phone: (916) 358-2950
Fax: (916) 358-2953

Regional DFG Offices : <http://www.dfg.ca.gov/regions/>

Reporting an Incident to DFG:

The dispatching service, which operates 24 hours/day, will contact the appropriate warden who will return your call. Phone: (916) 445-0045.

Report Poachers & Polluters or to locate a Warden:

Call Cal-TIP toll-free:
1-888-DFG-CALTIP (888-334-2258)

Role - DFG / Fish and Game Wardens

Since 1870, Wardens, as peace officers, have enforced laws related to sport and commercial hunting and fishing. Currently there are 600 wardens statewide. In their role to protect fish/wildlife resources their duties include checking for licenses, adherence to bag limits, and poaching. They respond to calls of pollution, a major threat to our fish and wildlife resources. Pesticide pollution is a minor part of that threat.

Wardens work out of their homes in an organizational style called Community Oriented Policing." Wardens have many duties, but the ones pertinent to us are:

- Investigation of pesticide related fish and wildlife loss(es)
- Evidence collection and Forensic laboratory support
- Writing and serving search warrants
- Physical arrest of violators
- Implementing the Incident Command System (ICS)
- Acting as Incident Commander at pollution incidents
- Acting as government agency coordinator at pollution incidents

Pesticide Investigation Unit staff provide forensic lab support, as well as technical advice and guidance to Wardens on sample collection, and data analysis information.

Role - DPR /Enforcement Branch Staff and Enforcement Branch Liaison (EBL)

The primary responsibility of the Enforcement Branch is to enforce federal and California laws and regulations pertaining to the proper and safe use of pesticides. Branch staff oversee licensing and certification of dealers, pest control businesses and applicators; administer the nation's largest state pesticide residue monitoring program; monitor pesticide product compliance; and coordinate pesticide use reporting.

EBL's serve as Liaisons to CAC staffs providing: training, expertise, coordination, oversight, and program evaluation. They often assist CAC staffs in major incidents, particularly with sampling plans, and have overall responsibility for pesticide incident investigations. (For more information on this subject, please refer to Volume 5, pages 22, 23 available at http://www.cdpr.ca.gov/docs/enforce/compend/vol_5/investigation_procedure.pdf)

Role - CACs/ Agricultural Biologists

Regulating pesticides in California is a joint responsibility of the Director of the Department of Pesticide Regulation (DPR) and county agricultural commissioners (CACs). Section 2281 of the Food and Agricultural Code (FAC) 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.

Pesticide use enforcement activities in the field are largely carried out by 58 County Agricultural Commissioners and their staffs, comprising approximately 550 agricultural biologists throughout the state.

The CAC staffs have many duties that include:

- Evaluations of permit requests for the use of restricted pesticides
- Monitoring and conducting inspections of handling activities involving all pesticides, in both agricultural and non-agricultural settings
- Investigation of incidents suspected of being caused by pesticides, including the collection of evidence
- Providing outreach to industry regarding pesticide laws and regulations
- Taking enforcement action against violators
- Compilation of pesticide use information for their respective counties

Incident Guidelines & Procedures / Department of Fish & Game:

American Society for Testing Materials (ASTM)

Standard E1849-96 / Standard Guide for Fish & Wildlife Incident Monitoring and Reporting

The American Society for Testing Materials has published guidelines (standard E1849-96) for collecting, reporting, and interpreting fish and wildlife incident data. The guide covers planning

and completing a thorough investigation to determine an incident's cause. Recommendations for documenting and reporting incidents are provided.

A summary of the information necessary for completing a risk assessment and information on how fish and wildlife incident data are considered for regulatory decisions are also provided. DFG adopted the Guidelines (Standards) referenced above for handling fish/wildlife incidents. For specific information regarding sampling, Pesticide Investigations Unit staffs are called. DFG staff also follows the California Penal Code for matters of evidence collection, search and seizure, and chain of custody.

In addition to Standard E1849-96, DFG developed a Pollution Resource Manual, which provides procedures for handling spills affecting fish/wildlife.

Pollution Response Manual

Department of Fish and Game Office of Spill Prevention and Response OSPR 2007

This manual was written to provide guidance to DFG personnel in spill response. Much of the manual applies more to a large ongoing spill rather than a pesticide investigation. However, Appendix F contains sampling guidelines that provide helpful guidance in the case of a pollution investigation such as a pesticide-related wildlife loss. It is available on OSPR's Network N drive under "2007 Pollution Response Manual".

Incident Guidelines & Procedures / Department of Pesticide Regulation & County Agricultural Commissioners

DPR has developed The Pesticide Use Enforcement Program Standards Compendium (PUEPSC), which address procedures and protocols on a number of issues. These include:

A-Volume # 5, the Investigative Technique available at

http://www.cdpr.ca.gov/docs/enforce/compend/vol_5/invstprc.htm

Which include:

- 1-Investigative Sampling Manual
- 2-Investigative Techniques Manual
- 3-Pesticide Episode Investigation Procedures Manual

B-Other valuable documents that CAC and DPR field staffs have been using include:

- 1-Manual of Procedural Guidance for Pesticide Enforcement Personnel
- 2-Marketplace Surveillance Program Manual (Produce Residue Sampling)
- 3-Volume # 3 of the (PUEPSC) describe DPR policies and procedures on Restricted Materials (PM) and Permitting available at

http://www.cdpr.ca.gov/docs/enforce/compend/vol_3/rstrct_mat.htm

4-Volume # 2 deals with Inspection Procedures and is available at

<http://www.cdpr.ca.gov/docs/county/training/trngmenu.htm#inspect>

Pesticides - Types/Chemical Groups

Pesticides can be grouped a number of ways including by chemical "type" or by "chemical group".

The following are examples of the "types" pesticides and representative products:

<u>Insecticides</u>	<u>Herbicides</u>	<u>Fungicides</u>	<u>Rodenticides</u>
Lorsban	Paraquat	Captan	Ramik
Sevin	Eptam	Bravo	Warfarin
Ambush	2,4-D	Manex	Strychnine
Thiodan	Banvel	Thiram	Phostoxin
<u>Avicides</u>	<u>Pisicides</u>	<u>Algaecides</u>	<u>Attractants</u>
Avitrol	Rotenone	Copper sulfate	Pheromones (Checkmate)
Starlicide			Baits

The following are examples of common "chemical groups" and some products within these groups:

<u>Organophosphates</u>	<u>Carbamates</u>	<u>Chlorinated Hydrocarbons</u>
Phoskill Azodrin	Sevin Manex	Thiodan
Lorsban Diazinon	Temik Furadan	Kelthane
Phosdrin Dyfonate	Lannate Eptam	
<u>Synthetic pyrethroids</u>	<u>Anti-Coagulants</u>	<u>Fumigants</u>
Fenvalerate (Pydrin*)	Ramik	Methyl Bromide
Permethrin (Ambush)	Warfarin	Vikane
Esfenvalerate (Asana)	Rozol	Telone
Bifenthrin (Talstar)		Metam Sodium

Other chemical groups (less hazardous) are:

<u>Botanicals</u>	<u>Microbials</u>	<u>Insect Growth Regulators</u>	<u>Plant Growth Regulators</u>
Nicotine	Bacillus thuringiensis	Dimilin	Gibberillic acid
Rotenone	Viruses	Methoprene	Ethrel

*Note these are Trade names; active ingredients are not listed. Pesticides have many brand names, with the same active ingredient.

For more information on what is a pesticide and how to read a label, please refer to the following fact sheets available at:

<http://www.cdpr.ca.gov/docs/dept/factshts/what2.pdf>

<http://www.cdpr.ca.gov/docs/dept/factshts/read2.pdf>

Restricted Materials

Some pesticides are classified as “restricted use pesticides” at the federal level by US EPA or at the state level by the DPR. Pesticides are classified restricted due to:

- Danger of impairment to public health
- Hazards to applicators/farm workers
- Hazards to domestic animals (including honeybees) and or to crops from direct application or drift
- Hazards to environment from drift onto streams, lakes, or wildlife sanctuaries
- Hazards related to persistent residues in the soil resulting ultimately in contamination of air, waterways, estuaries, or lakes with consequent damage to fish, birds, & wildlife.
- Hazards to subsequent crops through persistent soil residues.

The use of restricted materials is closely regulated. These materials may only be used by certified commercial or private applicators who have been granted a possession and use permit by the local County Agricultural Commissioner’s (CAC) office, and hold proper and valid certification

A restricted materials permit (RMP) often includes specific use conditions. Users of restricted materials must provide a “notice of intent” listing specific sites/times at least 24 hrs prior to use, followed by a “pesticide use report” after the application is completed to the local CAC.

Application Methods

We can group application methods into aerial or ground applications. Aerial applications are made by fixed-wing aircraft or by helicopters. Both types of aircraft should fly within ten feet of the crop. Because aerial applications are made in 5 to 20 gallons of water per acre, they usually use liquid formulations of pesticides although some wettable powders are used. With the major exception of sulfur, dusts are less frequently applied by air because of the difficulty of containing dusts within the target area.

Ground applications take many forms including air blast sprayers in orchards and vineyards; boom sprayers on row crops and for pre-emergence weed killers; dusters, such as those used in vineyards for sulfur applications; backpack sprayers and dusters; soil injection rigs; chemigation or sprinklers application Chemigation is the addition of chemicals, in this case pesticides, to irrigation water. The water is then run through furrows, drip irrigation or sprinklers.

Pesticide Formulations

Even distribution of pesticides on the target crop is a major concern of manufacturers. Manufacturers use a variety of formulations depending on the solubility of the product to facilitate even distribution and, at the same time, minimize off target movement of the pesticide. Safety concerns for handlers also affects the formulations available, and the type of packaging used, such as water-soluble packets, and “lock and load” systems (a type of closed system).

Common designations for pesticide formulations include:

EC Emulsifiable Concentrate	WP Wettable powder	G Granular
DF Dry Flowable	WSP Water Soluble Packet	D Dust F Fumigant

Dusts are not soluble in water and are the most likely to drift off target. On the other hand granular formulations are the least likely to move off-target especially if they are drilled into the ground and loaded through a lock and load system.

Offsite Movement of Pesticides

Pesticides move off-target in three ways: by drift, by volatilization (rapid evaporation at normal temperatures and pressures), and in runoff water. Wind is the most common cause of drift but heat inversion and fog can also contribute. Certain pesticides are volatile and move off-target by volatilization. Runoff water can also be a culprit in the off-site movement of pesticides, even several months after the application.

For more information on DPR Policy regarding Pesticide Drift. Please refer to:
<http://www.cdpr.ca.gov/docs/enforce/drftinit/drftmenu.htm>

Incidents – Response Levels

DEPARTMENT OF FISH AND GAME – Investigation Procedures

Fish and Game wardens have a Pollution Response Manual that describes their "Incident Command System". Most pesticide investigations are limited in scope and can be handled by the local enforcement personnel and OSPR's Pesticide Investigation Unit. In cases where an emergency response is needed, the appropriate ICS response can be found in the Pollution Response Manual.

Under an MOU (1988), with the US Fish and Wildlife Service (USFWS), DFG is the primary contact for fish and wildlife issues in the event of a toxic substance spill within the State. If any of the following facilities or species are at risk or impacted by a spill, a DFG representative should notify the USFWS:

1. National Wildlife Areas
2. Coleman Hatchery
3. Federally threatened and/or endangered species or their habitat.
4. Anadromous fish spawning grounds or migratory corridors.
5. Marine bird concentration areas.
6. Migratory waterfowl concentration ares.
7. Sea otters or their habitat.
8. National Marine Sanctuaries.

Incidents - Levels of Response

DEPARTMENT OF PESTICIDE REGULATION / COUNTY AGRICULTURE COMMISSIONERS

DPR/CAC staff recognizes four types of pesticide related incidents, although some may include elements of more than one type. These are: human effects; property environmental effects; economic loss; and special incidents.

DPR categorizes investigations of pesticide related incidents as either priority or routine. As referenced under Investigations – Guidelines and Procedures, DPR/CAC staff follow established policies and procedures when responding to various pesticide incidents, whether priority or routine.

Priority incidents are based upon specific criteria or “triggers” established through a cooperative agreement between US EPA/DPR/CACs. Priority incident investigations have established timelines, and reporting requirements, while the timelines and reporting requirements for routine investigations are not as stringent. The following are specific criteria for determining a priority incident:

Definitions for Priority Incidents

The investigator must consider the priority episode investigation criteria contained in the US EPA/DPR/CACASA Cooperative Agreement for each episode available a

<http://www.cdpr.ca.gov/docs/county/cacitrs/penfltrs/penf2003/2003atch/attach39.pdf>

These Criteria includes:

Human Effects:

- * Death, including suicide
- * Serious illness (any pesticide illness requiring hospital admission as is “in-patient status”)
- * Injury or illness involving 5+ people, which may result from a single episode

Environmental Effects:

- * Water - Contamination of drinking water affecting 10 or more households
- * Air - Contamination of air resulting in evacuation or recommendation to evacuate 5 or more persons by representatives of legally authorized agencies.
- * Land - Contamination of land or soil resulting in one-half (1/2) acre or more not usable for intended purposes for one year or more.

Animals (and Wildlife): Any pesticide incident with associated level of mortality that exceeds the following: (Non-target refers to unintended recipients of a pesticide application)

- * Birds – 50 Non-target
- * Fish – 500 Non-target
- * Endangered or Threatened Species – 1
(Note Response to be handled on a case by case as described under Special Incidents)
- * Domesticated, Game or Other non-target animals – 5

Economic Loss:

- * Damage to any property, equipment, livestock (including bees), that is estimated to represent a \$20,000 loss or 20% crop yield (whichever is appropriate).

Special Incidents include:

- 1) Pesticide episodes (or suspected episodes) occurring within Oregon, Nevada, Arizona, Mexico, or tribal lands that have effects in California
- 2) Pesticide episodes (or suspected episodes) occurring within California that have effects in Oregon, Nevada, Arizona, Mexico, or tribal lands
- 3) Any accident involving pesticide application aircraft when it is determined that pesticide exposure or effects caused the accident or the accident resulted in pesticide contamination
- 4) Any pesticide related incident, including those involving endangered species, which through discussion between DPR/CACASA/EPA is determined to be of high priority. These incidents shall be tracked as a priority and all parties will be kept apprised of the status of the investigation.

(For more information, please refer to Volume # 5, Investigative Technique)

Incident Information

California's pesticide regulatory program administered locally by County Biologists, with support from DPR staff who provides a number of tools used in the oversight of pesticide use, including various monitoring inspections, assistance in conducting investigations, audits, pesticide reporting requirements, training documentation, licensing requirements for applicators, and enforcement actions, as well as maintaining an up-to-date database of statewide violations and enforcement actions

Thus, when an incident does occur, particularly in production agriculture, County Biologists can call up information regarding a specific site, history of pesticide usage, past monitoring inspections, past audits, restricted materials permit conditions, if applicable, licensing or certification information, and past enforcement history, if applicable.

Pesticides used in the production of agricultural commodities and other agricultural use situations, pesticides applied by commercial applicators, or pesticides designated, as "restricted materials" must be reported to the local County Agricultural Commissioner on designated forms within specific timeframes.

Restricted materials usage carry specific notification, certification, monitoring, and reporting requirements. For example, a Notice of Intent (to apply) is required between four days and one day prior to the application. This notice must include: crop, location, number of acres, pesticide/EPA registration number, applicator, method of application, rate and dilution of the pesticide, existence of sensitive environmental sites. And other pertinent information

After the application, the property operator or commercial applicator must report the actual amount of each pesticide used on a Pesticide Use Report. Both restricted and non-restricted

pesticide uses are reported. Commercial applicators report within 7 days of application, while growers report monthly.

County agricultural biologists perform several kinds of inspections. These include: Pesticide use monitoring inspections such as pre-application site, application, mixing and loading, equipment, and field worker safety inspections, and structural pest control inspections.. Record inspections include: Pest Control Operator, Pest Control Dealer, Pest Control Adviser and grower record inspections, and pesticide storage inspections.

In addition to recorded inspections, and paperwork requirements, various samples, such as grid, gradient, swab, dislodgeables, clothing, water, and soil samples can be collected according to established policy and protocols to aid in an incident investigation

Summary

This workbook is meant to provide a broad overview of the roles, responsibilities, and typical duties performed by DFG Wardens, County Biologists, and DPR staff in order to gain insight into each other's duties and concerns, particularly with pesticide/wildlife incidents.

While DFG and DPR/CAC staff follow different procedures and standards for incident investigations and response, it is hoped that through this training will help increase awareness of the Memorandum of Understanding, the Pesticide/Wildlife Incident Response Plan Agreement with contact and notification procedures, and types of evidentiary information available will aid staffs from each agency in assisting each other should an incident arise.

