California Environmental Protection Agency
Department of Pesticide Regulation

Chlorpyrifos Update

January 2019

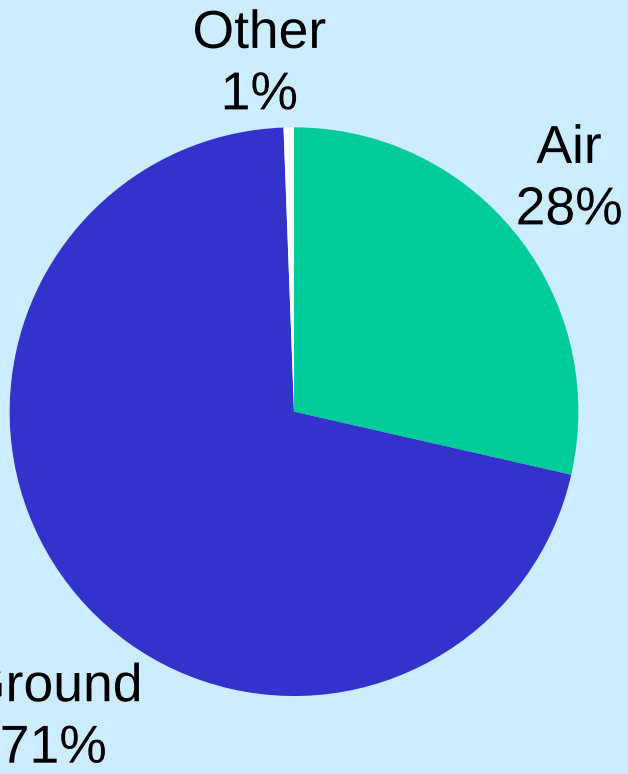
Background

- Chlorpyrifos is a California restricted material, requiring
  - A permit from the county agricultural commissioner prior to purchase and use
  - Applications to be made or supervised by a certified applicator
  - An evaluation by the county agricultural commissioner of local conditions prior to a proposed application
    - Based on the evaluation, the commissioner may approve, deny, or condition a permit

Chlorpyrifos application methods

Ground-rig sprayer
from theecologist.com

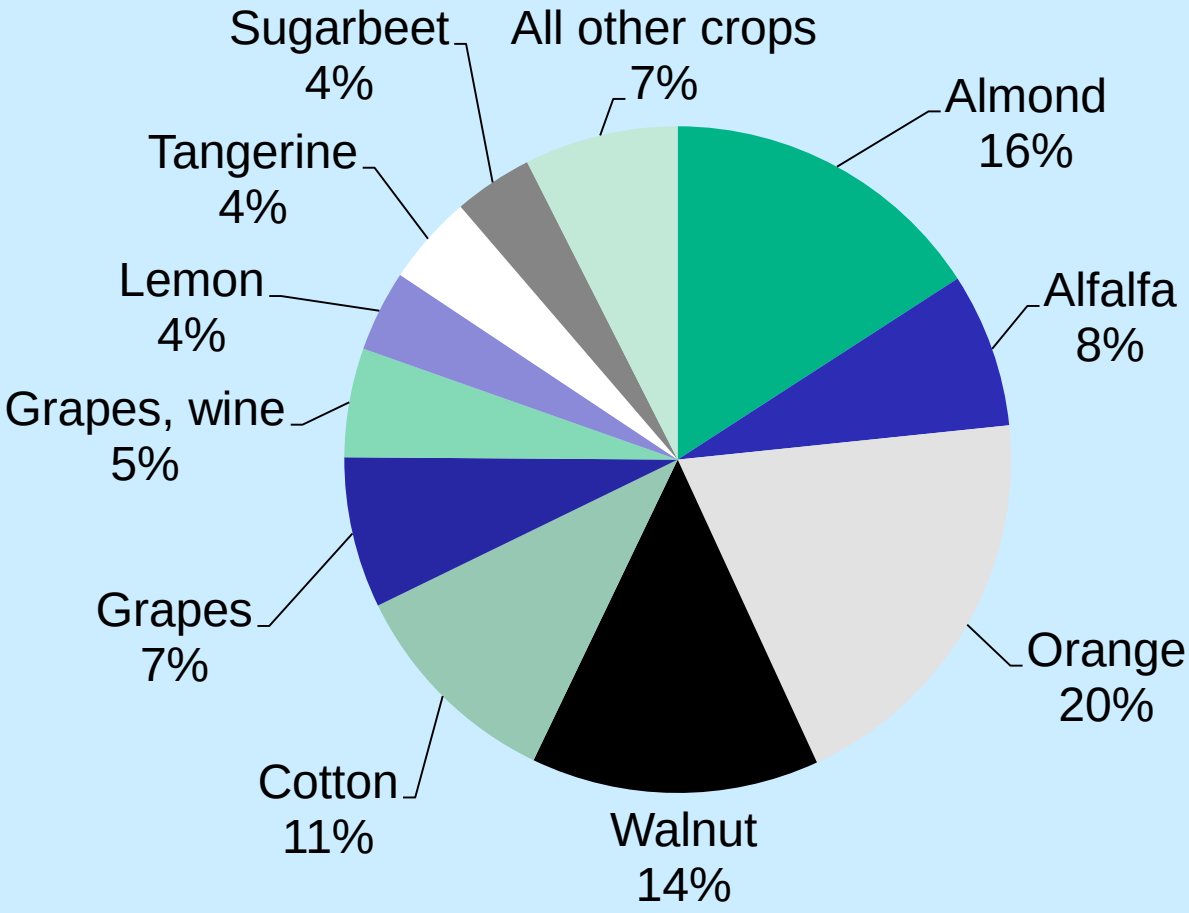
Airblast sprayer
from Virginia Tech



Aircraft
from FreshFruitPortal.com

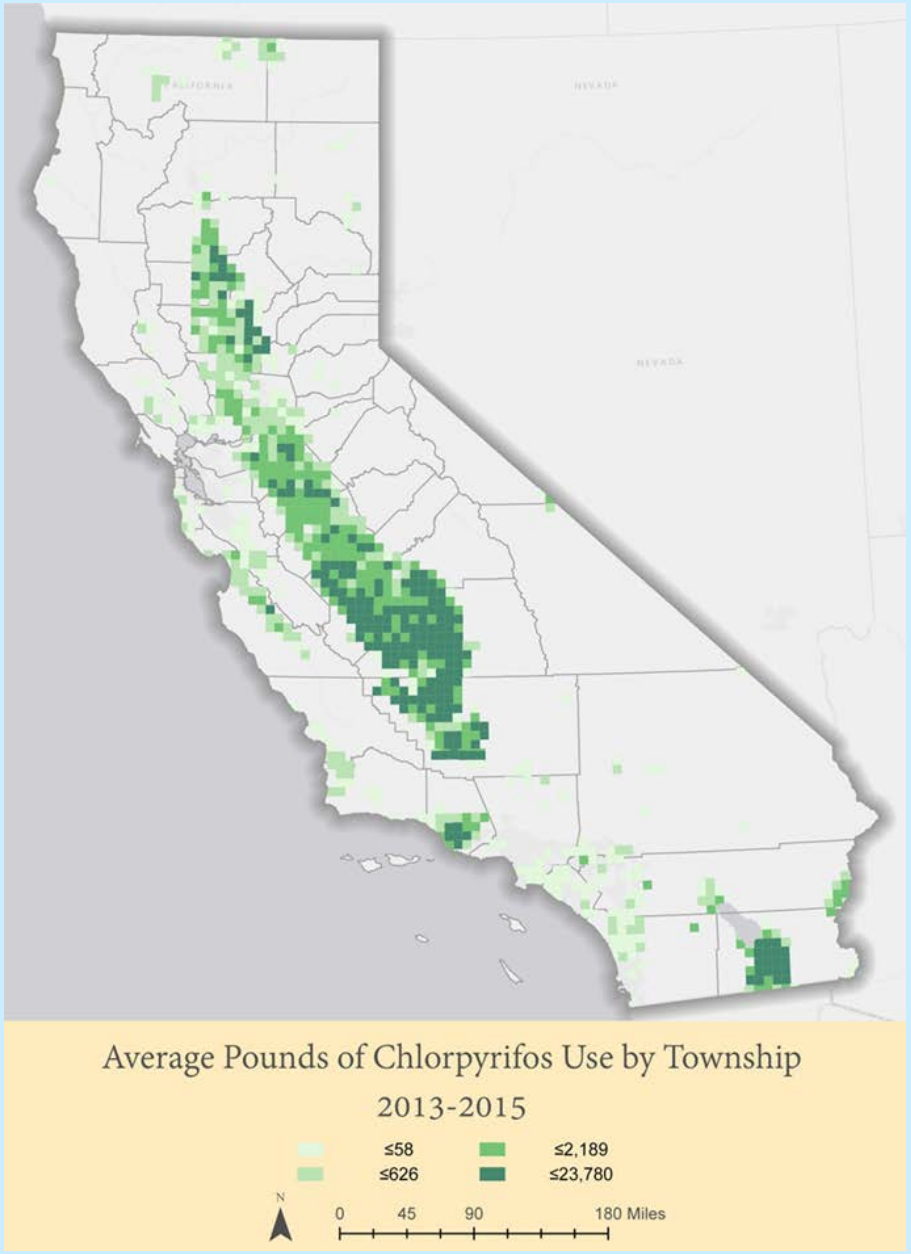
Chlorpyrifos use

- Chlorpyrifos is an organophosphate insecticide used on more than 60 crops



Chlorpyrifos use by township (6x6 mile area)

- Most use occurs in the Central Valley, Central Coast, and Imperial regions



Chlorpyrifos risk assessment and mitigation as a toxic air contaminant (TAC): Estimated Timeline

Date	Event
Jul 2018	DPR finalized its health risk assessment
Sep 2018	DPR noticed a proposed regulation to list as a TAC
Apr 2019	TAC listing regulation goes into effect
Summer 2019	DPR consults with other agencies on need for and degree of mitigation needed
Fall 2019	If needed, DPR develops of mitigation regulation
Spring 2020?	Proposed regulation for TAC mitigation released for public comment
Spring 2021?	TAC mitigation regulation goes into effect

DPR recommended interim permit conditions

- Application method restrictions
- Requirements for pest control adviser recommendations and notices of intent
- Only low drift applications or “critical uses” are allowed, with ground equipment
- Buffer zone of 1320 feet (1/4 mile) during application plus 24 hours, with only handlers and transit allowed
- Setback of 150 feet from sensitive sites

Application method restrictions

- Aerial applications prohibited
- Wind speed 3 – 10 mph
- Application size no more than 40 acres in 24-hour period
- Airblast restrictions
- Chemigation requires trained person during application
- Granules must be incorporated or cleaned up

Requirements for pest control adviser (PCA) recommendations and notices of intent (NOI)

- PCA recommendation is required and must describe allowed type of application to be made

- NOI must be submitted to ag commissioner at least 48 hours prior to application

Allowed uses

- Low drift applications for any crop
  - Precision sprayers meeting Natural Resources Conservation Service criteria
  - Granular products – exempted from setbacks and buffers
  - Drip chemigation – exempted from setbacks and buffers
- General critical uses for any crop
  - Section 18 (emergency exemption)
  - Section 24c (Special Local Need, SLN)
  - Requirement for quarantine, invasive pest

Allowed uses based on UC consultation

- 19 specific crop/pest critical uses with few or no alternatives
  - Alfalfa for weevils, blue alfalfa aphids, cowpea aphids
  - Almonds for leaffooted bug, stink bugs
  - Asparagus for garden symphylans, asparagus aphid
  - Citrus for ants
  - Cole leafy vegetables for root maggots
  - Cotton for cotton aphid, sweetpotato whitefly
  - Garlic for root maggots
  - Grapes for ants, vine mealy bugs
  - Onions for root maggots
  - Peppermint for garden symphylans, mint root borers
  - Walnuts for borers

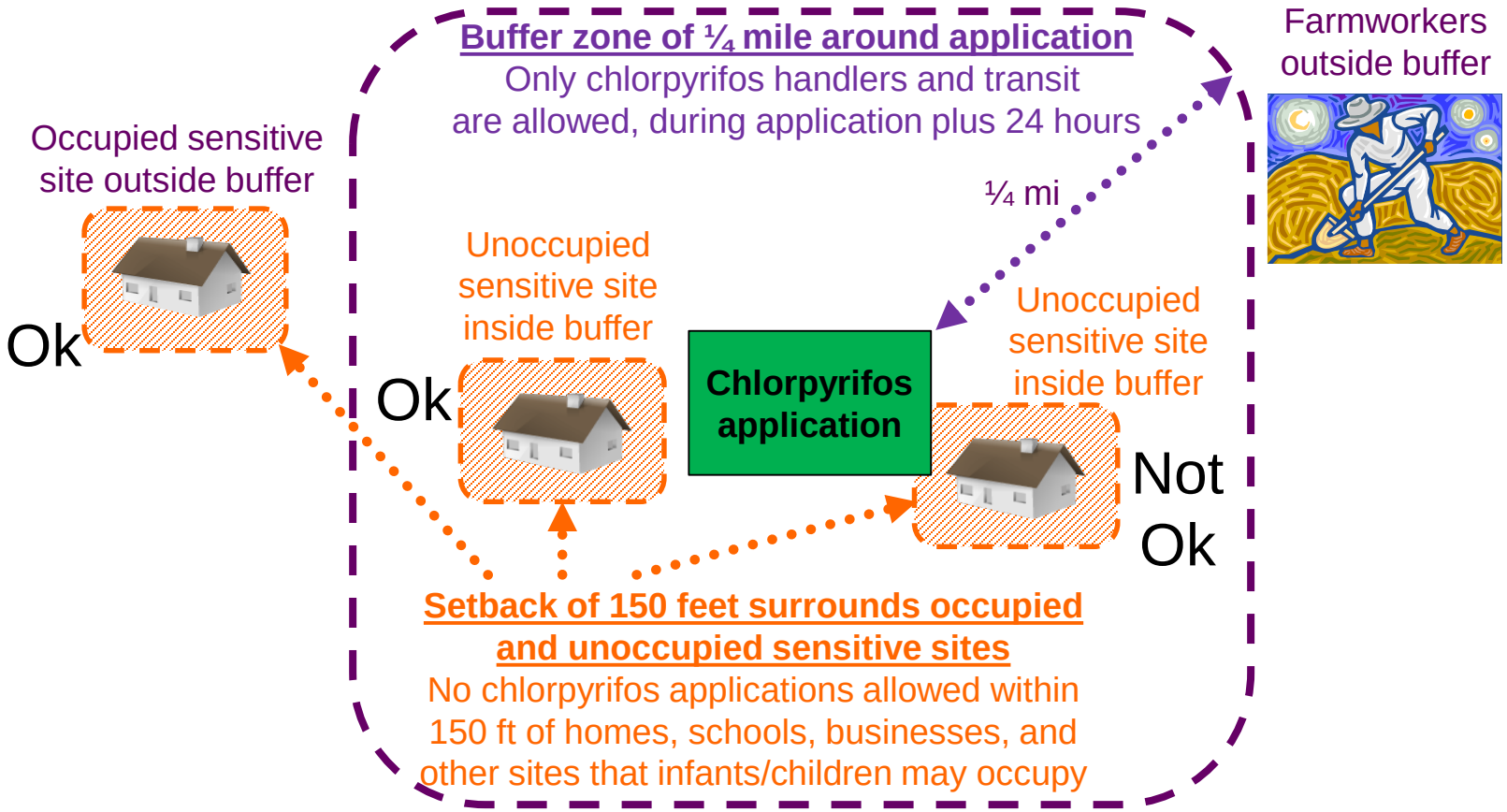
Buffer zone

- A buffer zone of ¼ mile (1320 feet) surrounds all allowed applications, except granular and drip
- Only handling activities and transit allowed in buffer zone
- Buffer zone is in effect during application, plus 24 hours
- Buffer zone may extend into other properties with permission
- Buffer zone may extend into roads
- Buffer zones may overlap, but applications within ½ mile cannot exceed 40 acres

Setback

- A setback is required in addition to buffer zone, except granular and drip applications
- A setback of 150 feet surrounds a sensitive site
  - Sensitive sites are defined by labels and includes areas frequented by non-occupational bystanders, especially children
- No chlorpyrifos applications are allowed in the setback
- Setback is required whether sensitive site is occupied or unoccupied

Chlorpyrifos buffer zone and setback



Additional information

- DPR website: www.cdpr.ca.gov
  - A-Z Index link
  - Restricted materials (Enforcement Standards Compendium) link
  - Appendix O link