Ambient Air Monitoring in California

Air Program | Environmental Monitoring Branch

October 14, 2020

South Central Fresno Community Steering Committee

Background: What is the Air Program?

Why Do We Monitor? How Do We Monitor?

Where Are We Monitoring? Results, Reports, and Outreach

Questions Contact Information

Today's Agenda
October 14, 2020

Background:
What is the Air Program?

❖ As part of the Environmental Monitoring Branch at the Department of Pesticide Regulation (DPR), the Air Program is responsible for **assessing** pesticide concentrations in air and **mitigating** adverse risks associated with pesticide applications.

o Collecting air monitoring data is needed for this goal

o Air monitoring data is supplemented with computer modeling and other data to estimate concentrations and emissions

Background:
What governs the Air Program?

❖ Key laws for Air Program:

o California Food and Agricultural Code - Continuous evaluation

o California Toxic Air Contaminant (TAC) Act
  • Requires DPR to assess and mitigate risks from air exposure
  • Requires ARB to monitor at DPR's request

Background:
Why Do We Monitor?

Depending on the study, DPR performs air monitoring to:

- Identify pesticides in air
- Determine acute, sub-chronic, or annual concentrations
- Assess subchronic, chronic, and/or cumulative exposures
- Track trends in air concentrations over time
- Determine efficacy of mitigation measures
- Determine pesticide emission rate (flux)
- Validate and refine air computer models

How Does DPR Monitor For
Pesticides in Air

Application-site Monitoring	Seasonal Monitoring	Long-term Monitoring

How Does DPR Monitor For Pesticides in Air

Application-site Monitoring

- Monitoring occurs on or at the edge of the application field

- Monitoring occurs for several days after the application

- Data best used to estimate maximum exposures over hours or days

How Does DPR Monitor For Pesticides in Air

Seasonal Monitoring

- Monitoring is conducted in communities of higher pesticide use relative to other communities.

- 1-2 pesticides is conducted for the 8-12 week period that coordinates with the historical use season.

- Data best used to estimate maximum exposures over weeks or months

How Does DPR Monitor For Pesticides in Air

Long-term Monitoring

- Continuous weekly air sampling is performed in communities with high use of multiple pesticides

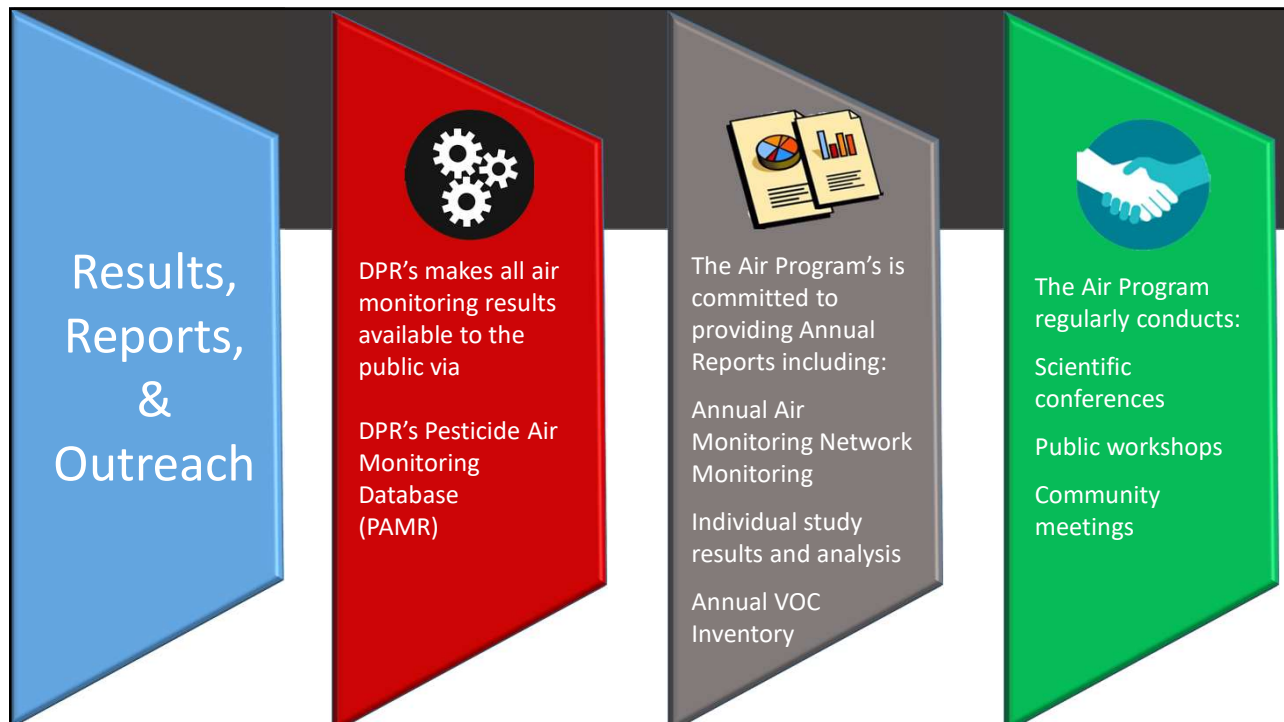- Data best used to assess maximum exposures for multiple pesticides over years

Where Do We Monitor?

Long-Term Air Sampling Sites

Recent Seasonal Air Monitoring Sampling Sites

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Results, Reports, & Outreach

DPR's makes all air monitoring results available to the public via

DPR's Pesticide Air Monitoring Database (PAMR)

The Air Program's is committed to providing Annual Reports including:

Annual Air Monitoring Network Monitoring

Individual study results and analysis

Annual VOC Inventory

The Air Program regularly conducts:

Scientific conferences

Public workshops

Community meetings

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Questions?
Contact Us

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Additional Information is available:

DPR's Air Program Site

http://www.cdpr.ca.gov/docs/emon/airinit/airmenu.htm

Air Monitoring Network

http://www.cdpr.ca.gov/docs/emon/airinit/air_network.htm