



UAVs

ASSOCIATION OF AMERICAN PESTICIDE CONTROL OFFICIALS

EPA Presentation

March 11, 2020

Office of Pesticide Programs

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Potential Benefits & Opportunities

Reduction in worker exposure, targeted applications, reduce environmental loading

- Control invasive weeds and target applications in tough and difficult conditions (e.g., cliff sides)
- Reduce environmental loading through GPS-initiated applications
- Potentially faster and cheaper than traditional aerial applications
- Potentially less worker exposure to pesticides particularly in areas where hand application is needed
- Potential increased pilot safety in difficult terrain
- Applications can be made closer to crop canopy, reducing spray drift
- Spot or partial field applications become more viable
- Night time application can feasibly occur



Challenges & Issues

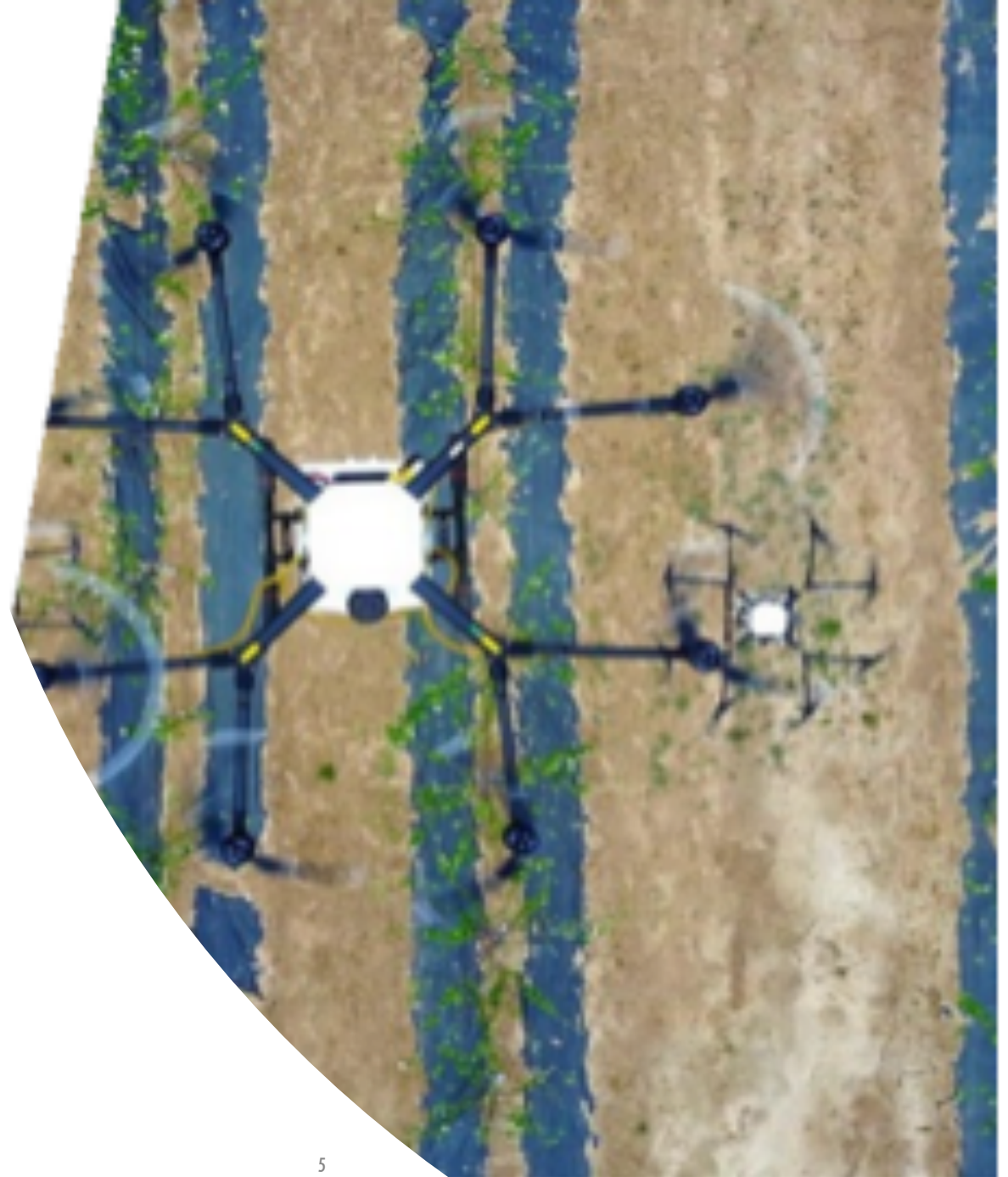
Safety, implementation, regulatory compliance

- Does “Aerial application” incorporate UAVs?
- FIFRA-labeling compliance issues?
- Uncertainties in modeling and assessments?
- Data needs and requirements?
- Agency policies/decisions?
- Operator definitions?
- Drift/safety?
- Change in technology impacts and assessments?



EPA Communications to Date

- PPDC (May 2019)
- AAPCO (Emerging Technology Workgroup)
- SFIREG
- Organization for Economic Cooperation and Development (OECD)
- CLA
- Registrants
- Equipment Manufacturers
- National Agricultural Aviation Association
- FAA
- Modelers
- Researchers



OECD Questions

- “Seeking to understand and characterise how the use of drones/UAVs as an application method leads to risks that differ from those resulting from current methods of application.”
- “Looking for information on pesticide application by drones/UAV that can help inform the following areas of pesticide risk assessments: Operator and Bystander Exposure; Dietary Exposure; Environmental Exposure (Fate and Behaviour; Ecotoxicology); and Efficacy.”
- “Generate guidance on the necessary data requirements to support pesticide application by drones, in recognition of any different risks from conventional applications (both ground-based or aerial), with the objective of building-in future proofing (recognising the pace of technological developments).”

AAPCO Technology Workgroup

- Ten Questions
- Plus One (Question 11)
- Scope of UAV use in United States.
- Continue engagement and conversations

EPA Ongoing Efforts

- Continue to understand scope of products and use patterns that may benefit from UAV applications.
- Continue to obtain data, and identify current data gaps and uncertainties posed by UAVs in risk assessments and FIFRA decision making.
- Continue to develop agency policy outlining acceptable UAV use patterns that covers: labeling, regulatory clarity, safety, and enforcement issues.
- Continue to develop EPA position on UAVs' equivalence to "aerial" application.
- Continue to address any label interpretation concerns from stakeholders (e.g., boom length to rotor specifications, fixed wing and helicopter application methods).
- **Continue to develop OPP policy and strategy that coincides with the evolution of UAV technology (as opposed to hindering it) working in partnership with multiple stakeholders.**

What does this specifically mean for you today?

Thank You!