

NATIONAL ACADEMY OF SCIENCES' REVIEW OF CALIFORNIA'S RISK- ASSESSMENT PROCESS FOR PESTICIDES

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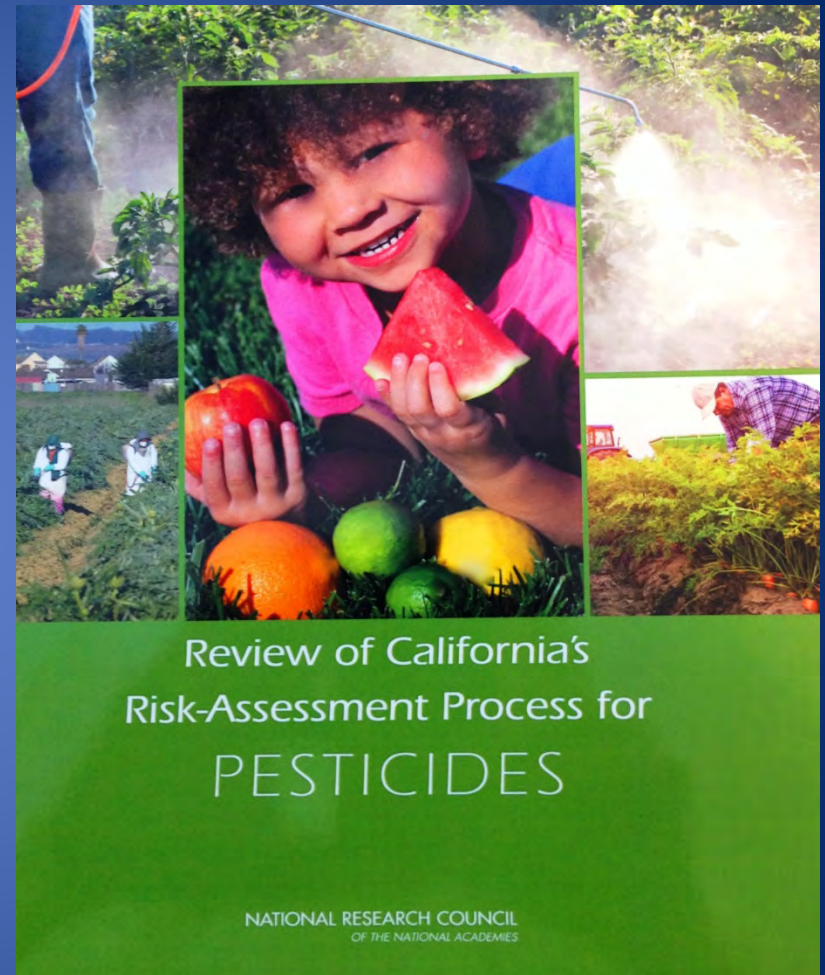
Department of Pesticide Regulation
California Environmental Protection Agency

Background

- In 2013, DPR contracted with the National Academy of Sciences (NAS) to conduct an independent peer review of DPR's risk assessment practices.
 - NAS convened a 9-member committee to conduct the peer review
 - DPR staff, USEPA, and other stakeholders (Croplife America, CRLA) presented to the committee
- NRC completed its review and issued a report in April 2015 with recommendations to improve DPR's risk assessment process.

Three Main Sections:

1. Priority-Setting
2. Risk Assessment Practices
3. Using California Data



DPR RESPONSE

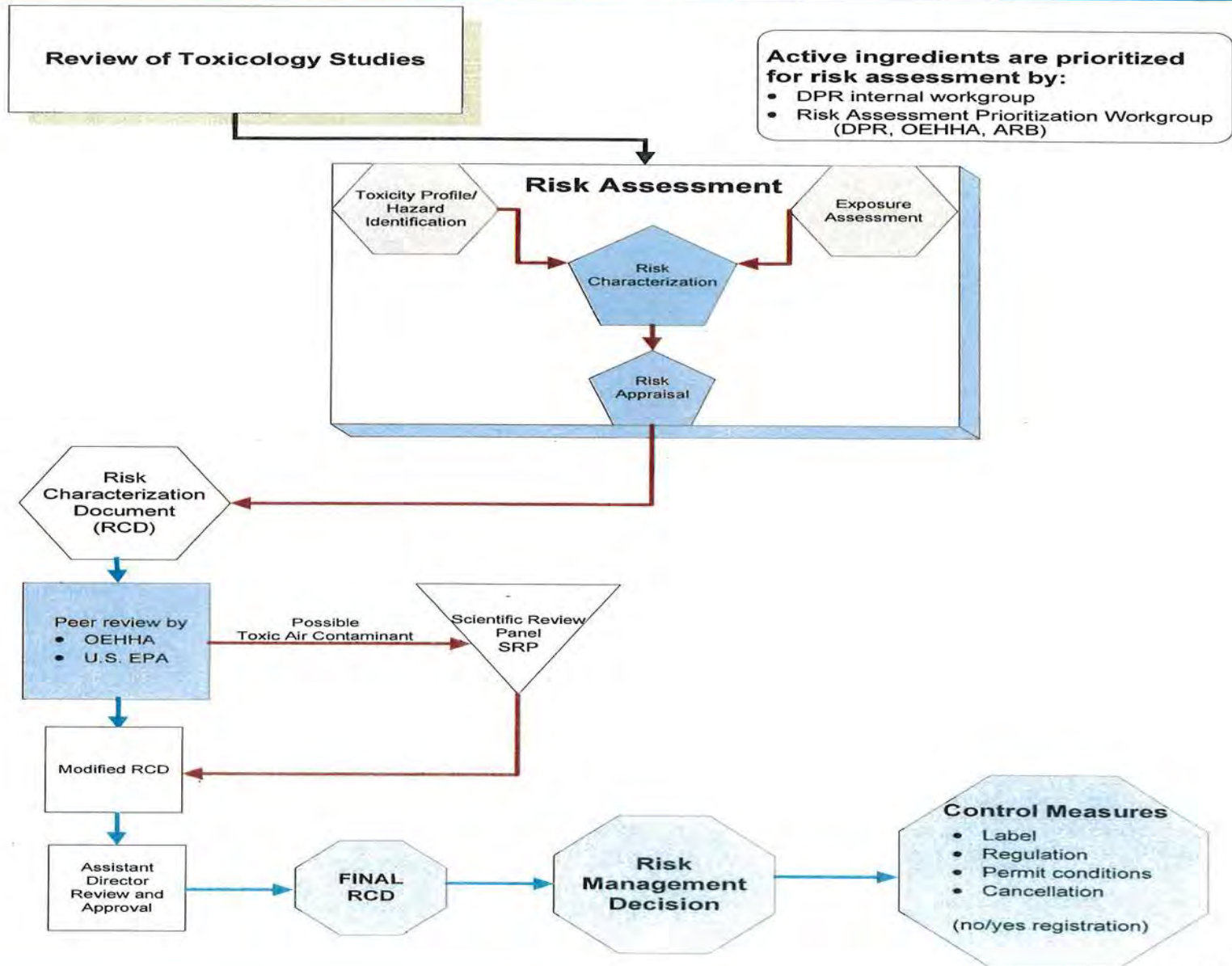
- DPR formed an internal workgroup to review and respond to the recommendations.
 - Evaluated the recommendations in terms of their ability to improve DPR's risk-assessment process and documents
 - Prioritized those recommendations that could be implemented by DPR in the near future.



Recommendations for Priority-Setting

- More transparent process
- More explicit documentation
- More objective and structured approach
- Consider development of a scoring system
- Use California-specific data in prioritization

Risk Assessment Process



DPR Responses:

Prioritization Process for Risk Assessment

- DPR updated and revised its process for prioritization of pesticides
- DPR develops a report to justify ranking of each active ingredient for risk assessment. If other systems of ranking will be suitable, DPR will evaluate it and incorporate in the future.
- DPR already uses California data and provides information about advisory groups.



RECOMMENDATIONS FOR RISK- ASSESSMENT PRACTICES FOR PESTICIDES

RECOMMENDATIONS FOR RISK-ASSESSMENT PRACTICES

- DPR should collaborate more with USEPA on risk assessments.
- DPR should use USEPA's hazard identification, dose-response assessment, and derivation of reference values as a starting point for its own evaluations (if EPA has a recent document) and focus on collecting California-specific exposure data and tailoring risk assessments for California's needs.

RECOMMENDATIONS FOR RISK-ASSESSMENT PRACTICES

- DPR should incorporate a problem formulation stage into its risk-assessment process
- Risk managers should be involved in the problem-formulation stage so that risk assessments can be designed to address the decisions that need to be made by the managers and other stakeholders.

RECOMMENDATIONS FOR RISK-ASSESSMENT PRACTICES

- DPR should update its risk-assessment guidance documents regularly, drawing from OEHHA and USEPA guidance.
- DPR should update its guidance on defaults including human variation in susceptibility to cancer and susceptible subpopulations
- DPR should discuss in risk management documents how the risk appraisal informed the final decision.

RECOMMENDATIONS FOR RISK-ASSESSMENT PRACTICES

- DPR should monitor and participate in the activities of USEPA and OEHHA in developing guidance for quantitative risk assessments, including unified approaches for cancer and non-cancer endpoints and cumulative risk
- DPR scientists should stay abreast of current trends in exposure assessment (specialized training, workgroups, task forces)

DPR Responses: Risk Assessment Processes

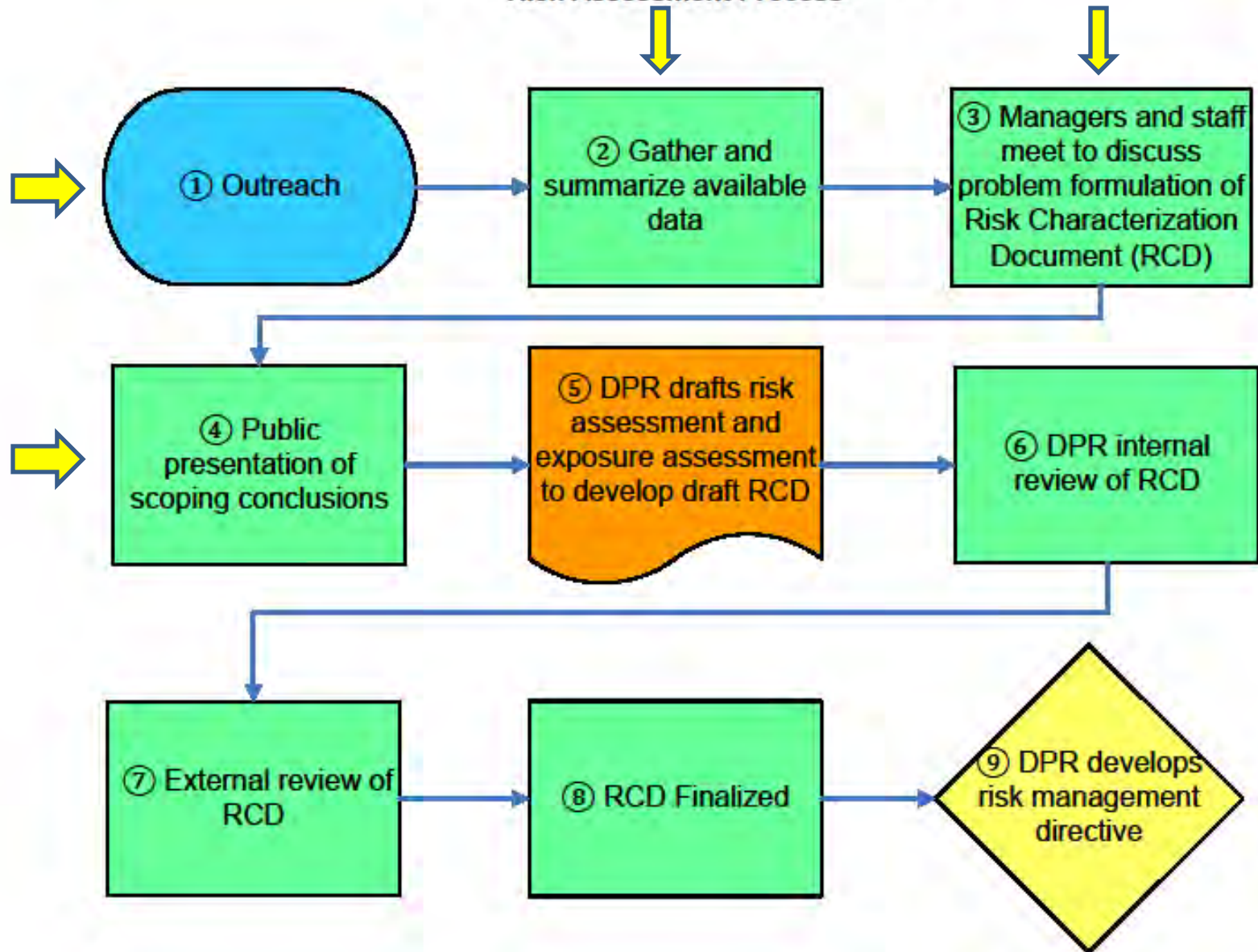
- DPR will use USEPA's risk assessment as a starting point to increase efficiency and productivity but will evaluate independently and not hesitate to make changes where needed
- DPR will tailor risk assessments to California-specific exposure scenarios
- DPR will update existing guidance documents using USEPA, OEHHA and EU guidelines with special attention to susceptible populations

DPR Responses: Risk Assessment Processes

- DPR will add a new problem formulation step into the risk assessment process, and will involve risk managers and stakeholders to ensure relevance to decisionmaking
- DPR will include more explicit discussion of uncertainty and of how the risk appraisal informed the final risk management decision



Department of Pesticide Regulation (DPR) Risk Assessment Process



RECOMMENDATIONS FOR USING CALIFORNIA DATA

- Expand PUR to include more detail on non-agricultural applications and improved geospatial resolution
- Review PUR, air monitoring and pesticide illness data together to look for patterns
- Continue efforts to improve reporting to the CA Pesticide Illness Surveillance Program

DPR Responses: Using California Data

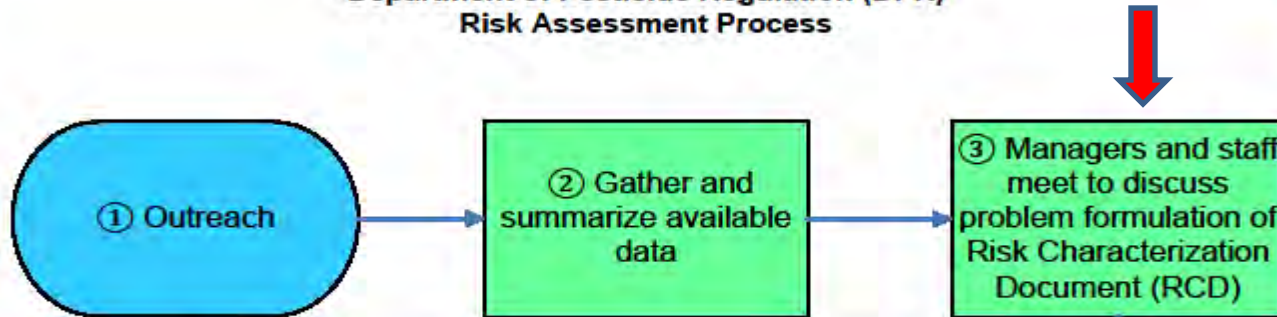
- DPR will continue to use California data
- We will explore the possibility of more detailed information in the PUR on non-agricultural pesticide use
- We will continue to look at PUR, air data, and illness data together
- We will continue to work with OEHHA to improve illness reporting

Pilot Risk Assessment

- DPR will pilot the new risk assessment approach this year
- January 2016, DPR initiated internal discussions on what active ingredient can be used to pilot the new process
- Fipronil was chosen
 - Hazard ID was initiated early 2000's but project shelved due to other priorities
 - Relatively limited uses compared to other active ingredients

Pilot Risk Assessment

Department of Pesticide Regulation (DPR) Risk Assessment Process



QUESTIONS?