



An open letter to members of the Pesticide Registration and Evaluation Committee (PREC)

July 2, 2021

PREC should promote transparency about DPR's risk assessment and mitigation

To the 15 members of PREC and their alternates:

We are writing to request PREC to take a more active and consistent role in reviewing information about DPR's risk assessment and mitigation. Specifically, we recommend that PREC consider requesting annual progress reports from DPR on this critical part of DPR's mission. As a first step, we ask you to support including this topic on the formal agenda of the next available PREC meeting.

In the past 10 years, DPR has posted draft or completed risk characterization documents (RCDs) for about 16 pesticide active ingredients. Of those, DPR initiated actions to mitigate risks for about six active ingredients. Mitigation typically cannot occur without a finalized RCD. For details, please see the attached table.

Those risk assessments, when followed by mitigation actions, represent a substantial contribution to protecting the health of Californians. In particular, we concur with DPR's decision to focus much of current risk assessment and mitigation efforts on the soil fumigants. That includes the decision to initiate risk assessment on the fumigant AITC before deciding whether to allow registration in California. As highly toxic and volatile pesticides, fumigants pose high hazards, and thus are appropriate targets for prioritized risk assessment and mitigation.

However, these results are not sufficient to address DPR's mission. Here's why:

- **DPR currently manages 1,058 unique active ingredients.** "Active ingredient" means, a chemical used in California as a pesticide - - e.g., to kill weeds, repel fleas, or alter the growth of crop plants. Some active ingredients have very low toxicity; others are more hazardous. At the rate of 16 assessments per 10 years, it would take decades to assess even a fraction of this total.

- DPR's most recent public prioritization, in 2014ⁱⁱ, listed the top-10 priority active ingredients for risk assessment. All 10 pesticides are in active use today, yet **all 10 are still waiting for DPR to initiate the risk assessment process**. DPR's more-comprehensive 2011 assessmentⁱⁱⁱ listed **82 active ingredients as "high" priority for risk assessment**. Most of the 82 are still in active use, but DPR has initiated risk assessment for only a handful (see attached table).
- To that daunting backlog must be added at least some of the new active ingredients that DPR is registering at a rate of roughly 15 each year.^{iv}

As with risk assessment, the recent pace of mitigation simply is not adequate to protect Californians' health. After a risk assessment has identified unacceptable risks, **DPR routinely takes more than 4 more years to put mitigation protections into place** (see attached table). Those years of delay represent illness and health impacts that can and must be prevented. Six mitigations in 10 years is not sufficient to address DPR's mission.

What can be done to solve these problems? *We think it is incumbent on DPR to answer that question.* There is great wisdom in the adage: "Good, fast, and cheap - - pick any two". California needs good, *and faster*, risk assessment and mitigation, and the resources necessary to carry it out. DPR clearly will require a better strategy for managing its risk assessment and mitigation process, as recommended by the National Research Council (NRC).^v Bottom line, it is incumbent on DPR to determine how to accelerate the pace of risk assessment and mitigation.

Leadership by PREC could play a valuable role in helping DPR, and the public, track progress. As a public agency, DPR should be transparent. Therefore, **we recommend that PREC consider requesting annual progress reports from DPR on risk assessment:**

- What process is DPR using to prioritize specific pesticides for risk assessment?
- What is the current list of pesticides that are highest priority for risk assessment?
- How many risk assessments will need to be done per year to keep up with the list?
- And, what progress is DPR making towards that target?

In its 2015 review of DPR's risk assessment process, the NRC recommended:

"DPR should update its documentation of its priority-setting process to provide more details so that the public can understand the process better [including] ... indicating the opportunities for public input."^v

To help implement this recommendation, PREC needs to resume its traditional roleⁱⁱⁱ of receiving, and publicly reviewing, progress reports on risk assessment.

Equally important, **PREC needs to promote transparency about how DPR implements mitigation once risk assessments find unacceptable risks.** Again, we recommend annual progress reports. The reports should include:

- the current list of pesticides for which risk assessments have identified unacceptable risks,
- how much time has elapsed since each risk assessment, and
- specific target dates for implementing mitigation.

Again, it is up to DPR to find solutions for accelerating mitigation. But we remind all parties that the NRC recommended:

“DPR should incorporate problem formulation and other relevant elements recommended in the 2009 National Research Council report ... so that a risk assessment can be designed to address the decisions that need to be made by managers and other stakeholders.”^v

A key perspective from that 2009 report is that:

“Risk assessment should be viewed as a method for evaluating the relative merits of various options for managing risk rather than as an end in itself.”^{vi}

In the recent example of fipronil, DPR did include mitigation options in the initial “Problem Formulation Document”^{vii}, but did not evaluate mitigation options within the draft Risk Characterization Document^{viii} recently released for review. When asked how long subsequent fipronil mitigation might take, DPR’s spokesperson replied: “we have no definite schedule”. It would be helpful to have greater transparency.

Thank you in advance for resuming PREC’s traditional role of promoting transparency about DPR’s risk assessment and mitigation. This is one of the best ways for PREC to live up to its stated mission: “to foster communication and understanding on pesticide issues”.^{ix} As a first step, we ask you to support including this topic on the formal agenda of the next available PREC meeting.

Yours sincerely,



Jane Sellen & Sarah Aird, Co-Directors, Californians for Pesticide Reform
Anne Katten, Pesticide and Worker Safety Project Director, California Rural Legal Assistance Foundation

Pesticide active ingredients prioritized for risk assessment by DPR

| Name of active ingredient (AI) | DPR priority rankings: | | Risk assessment status 2021 ^x (assessments more recent than 2011) | Mitigation status 2021 ^x (actions more recent than 2011) |
|--|------------------------|------------------------|--|---|
| | in 2014 ⁱⁱ | in 2011 ⁱⁱⁱ | | |
| Mancozeb | 1 | High | none listed | none listed |
| Paraquat dichloride | 2 | High | none listed | none listed |
| Dimethoate | 3 | High | none listed | none listed |
| Iprodione | 4 | High | none listed | none listed |
| Propylene oxide | 5 | High | none listed | none listed |
| Ziram | 6 | High | none listed | none listed |
| Glufosinate ammonium | 7 | High | none listed | none listed |
| Cypermethrin | 8 | Moderate | none listed | none listed |
| Glutaraldehyde | 9 | High | none listed | none listed |
| PCNB | 10 | High | none listed | none listed |
| DPR did complete at least draft risk assessments on 16 AIs in the 10 years since 2011 (others may be underway)^{xv} : | | | | |
| Acephate | [not listed] | High | Addendum to RCD July 2013; recalc of exposure Mar 2018; review new products May 2019 | none listed [RMD May 2019 but no action yet] |
| Allyl isothiocyanate (AITC) | [not listed] | [not listed] | Draft RCD July 2020 ^{xii} | none listed [as of May 2021, DPR has not approved the soil fumigant registration] ^{xii} |
| Carbaryl | [not listed] | High | RCD June 2014 | Expanded designation as restricted material June 2020 [6 years after RCD] |
| Chloropicrin | [not listed] | High | RCD Nov 2012; update to RCD Aug 2016 | Recommended permit conditions Feb 2017 [5 years after RCD] |
| Chlorpyrifos | [not listed] | High | Draft RCD Dec 2015; determination as Toxic Air Contaminant Aug 2018 | Cancellation of chlorpyrifos products Oct 2019 [4 years after RCD] |
| Deltamethrin & tralomethrin | [not listed] | [not listed] | Addendum to RCD Oct 2014 | none listed ["Possible Mitigation Needs" memo Feb 2015, but no action yet] |
| 1,3-Dichloropropene | [not listed] | High | RCD Dec 2015 | pending ^{xi} |
| Dicrotophos | [not listed] | [not listed] | RCD Dec 2016 ^{xvi} | DPR decided not to grant the SLN registration Oct 2016 ^{xvi} [same year as RCD] |
| Fipronil | [not listed] | High | Draft RCD Jan 2021 | none listed |
| Methomyl | [not listed] | Moderate | Draft RCD Nov 2015 [still pending as of Mar 2019] | none listed |
| Methyl isothiocyanate MITC (dazomet, metam sodium, metam potassium) | [not listed] | High | RCD July 2004; Exposure update Aug 2016 | Recommended permit conditions 2000 - 2015 ^{xiv} |
| Phosphine | [not listed] | [listed as underway] | RCD June 2014 | none listed |
| Propanil | [not listed] | High | RCD Feb 2019 | none listed |
| Propargite | [not listed] | High | RCD May 2014; recalculation of exposure Oct 2020 | none listed |
| Simazine | [not listed] | Moderate | RCD June 2013 | none listed |
| Sulfuryl fluoride | [not listed] | [not listed] | Addendum to RCD May 2020 | none listed ^{xiii} |

References and notes

RCD = Risk Characterization Document. RMD = Risk Management Directive.

i CDPR. 2021. *Actively Registered Active Ingredients (AI) by Common Name*. Available at: <https://www.cdpr.ca.gov/docs/label/actai.htm> (accessed 5/2/2021).

ii CDPR. 2014. *Final notice on active ingredients prioritized for risk assessment initiation*. Interested Parties memorandum dated September 12, 2014. Posted on CDPR's public website http://www.cdpr.ca.gov/docs/risk/final_%20notice_top_10_ais.pdf (accessed 2/24/2017).

This notice lists only the **top-10 highest priority active ingredients**. To the best of our knowledge, this is DPR's most recent public document about prioritization.

iii CDPR. 2011. *Prioritization and status of active ingredients for risk characterization: Report #52*. Memorandum from Gary Patterson, Chief, Medical Toxicology Branch to Pesticide Registration and Evaluation Committee (PREC) dated July 15, 2011. Posted on CDPR's public website http://www.cdpr.ca.gov/docs/dept/prec/2011/prec_letter_report_52_20110916.pdf (accessed 10/27/2017).

This report lists **82 high-priority**, 143 moderate-priority, and 98 low-priority active ingredients.

iv CDPR. 2021. *New active ingredients registered in California during 2020*. Available at: <https://www.cdpr.ca.gov/docs/registration/ais/newreg/2020.pdf> (accessed 4/18/2021).

and

CDPR. 2020. *New active ingredients registered in California during 2019*. Available at: <https://www.cdpr.ca.gov/docs/registration/ais/newreg/2019.pdf> (accessed 4/18/2021).

v National Research Council. 2015. *Review of California's Risk-Assessment Process for Pesticides*. Available at: <https://www.nap.edu/catalog/21664/review-of-californias-risk-assessment-process-for-pesticides> (accessed 4/28/2021).

vi National Research Council. 2009. *Science and decisions: Advancing risk assessment*. Available at: <https://www.nap.edu/catalog/12209/science-and-decisions-advancing-risk-assessment> (accessed 4/28/2021).

Reference "v" explicitly refers to this document within its recommendations.

vii CDPR. 2017. *Problem formulation document fipronil*. Available at: <https://www.cdpr.ca.gov/docs/risk/rcd/fipronil.pdf> (accessed 4/28/2021).

viii CDPR. 2021 *Fipronil risk characterization document draft*. Available via public records request at: https://www.cdpr.ca.gov/docs/whs/active_ingredient/fipronil.htm (accessed 4/28/2021).

ix CDPR. 2018. *Pesticide Registration and Evaluation Committee (PREC) Charter*. Available at: <https://www.cdpr.ca.gov/docs/dept/prec/preccharter.pdf> (accessed 4/28/2021).

x CDPR. 2021. *Human health risk assessment and mitigation by active ingredient*. Available at: https://www.cdpr.ca.gov/docs/whs/active_ingredient/index.htm (accessed 5/2/2021).

xi For 1,3-Dichloropropene, CDPR implemented several versions of recommended permit conditions during 2015 - 2017. However, those were only designed to address cancer risk to bystanders: https://www.cdpr.ca.gov/docs/whs/pdf/1,3-d_directive_mitigation.pdf

To evaluate additional mitigation options, 1,3-Dichloropropene also is the focus of ongoing field trials managed by DPR's Environmental Monitoring Branch:

https://www.cdpr.ca.gov/docs/risk/rcd/13-d_pilot_mitigation_options_march_2020.pdf

xii AITC has not had any active California registrations since 2013, but was evaluated as part of review of proposed registration as a soil fumigant. Source: presentation at 9/18/2020 meeting of PREC. As of May 2021, CDPR has not approved the soil fumigant registration.

xiii For sulfuryl fluoride, the 2020 reference concentration may be higher than in 2006 RCD, which may have been used to justify lack of additional mitigation.

xiv For MITC, 2015 is the most recent version of recommended permit conditions, which CDPR gradually developed via multiple versions during 2000 - 2015.

xv Some *CA Notices* announce initiation of risk assessments that are not listed within reference "x". For *CA Notices*, see:

<https://www.cdpr.ca.gov/docs/registration/canot/camenu.htm>

xvi Dicotophos has not had any active California registrations since 1991, but was evaluated in 2016 because of an application for a Special Local Needs Registration to control brown stink bugs on cotton: <https://www.cdpr.ca.gov/docs/risk/rcd/dicotophos.pdf>. DPR decided not to grant the SLN registration: <https://apps.cdpr.ca.gov/sln/>