



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MEMORANDUM

SUBJECT: Response to Draft Report entitled "The EPA Needs to Improve Transparency of Its Cancer-Assessment Process for Pesticides"

FROM: Michal Ilana Freedhoff, Ph.D., Assistant Administrator
Office of Chemical Safety and Pollution Prevention

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FREEDHOFF** Digitally signed by
MICHAL FREEDHOFF
Date: 2022.09.15
10:13:10 -04'00'

TO: Sean W. O'Donnell
Inspector General

This memorandum responds to the Office of Inspector General's (OIG's) July 20, 2022 Final Report entitled "The EPA Needs to Improve Transparency of Its Cancer-Assessment Process for Pesticides," Report No. 22-E-0053. The Office of Chemical Safety and Pollution Prevention (OCSPP) appreciates the opportunity to provide additional details to resolve Recommendations 1, 2, and 8 in the Final Report.

As you know, on August 9, 2022 the OIG reached out to OCSPP via email (attached) with additional clarification questions about OPP's current position on these three unresolved recommendations. The OIG team's responses and thoughtful questions helped to guide OCSPP to propose the revised proposed corrective actions described in this response, which we earnestly believe incorporates the team's feedback. Below is a summary of the OIG's comments from that August 9 email, OCSPP's proposed updated corrective action for each recommendation, a detailed rationale for our proposal, and estimated completion dates for all.

I. OCSPP's Amended Response to Recommendation 1

Recommendation 1: Issue guidance on when and how to conduct the kinetically-derived maximum dose approach in cancer risk assessments for pesticides.

OIG response: We would like more information to fully understand the corrective action proposed by OPP. (1) If OPP chooses to use the JMPR as its guidance, we would request that OPP update its public website now (vs. in two years) to indicate that, going forward, OPP will adopt the final JMPR's guidance as its own guidance in applying the KMD approach to cancer risk assessments for pesticides. (2) We would also like OPP to confirm that it will not apply the KMD to cancer risks assessments for pesticides until the JMPR guidance is finalized, unless the applications of the KMD to individual cancer assessments are peer reviewed.

Explanation: We agree that there is value in the transparency of the Agency's practices and procedures and OCSPP plans to update its website stating that OPP is adopting the JMPR

guidance when the guidance is final. While we fully expect the JMPR kinetics guidance will be consistent with the scientific principles of KMD as described in recent publications (e.g., Tan, Y. et al., 2021), OCSPP has concerns about publicly stating OPP will adopt a guidance that is still in the process of being drafted. OPP will update its public website to state that there is an ongoing effort by the JMPR to develop guidance on the KMD approach. After the JMPR guidance is available, OPP will thoroughly review the final JMPR guidance before we publicly announce its implementation. At the conclusion of our review, OCSPP will update the OPP public website to state that the EPA will rely on the JMPR kinetic guidance as EPA's guidance on when and how to apply the KMD approach in cancer assessments for pesticides.

OCSPP continues to strongly support the use of the best available science in its assessments, and this includes the use of kinetic information to inform and interpret dose responses. However, OCSPP does not anticipate applying the KMD approach used in 1,3-D cancer assessment for other pesticide cancer assessments prior to the completion of the JMPR guidance.

- **Proposed Corrective Action 1a:** OCSPP will update the OPP public website to state that there is an ongoing effort by the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) to develop guidance on the KMD approach.
- **Target Completion Date: December 31, 2022**
- **Proposed Corrective Action 1b:** OCSPP will update the OPP public website to state that EPA will rely upon the kinetic guidance currently being developed by the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) as EPA's guidance on when and how to apply the KMD approach in cancer risk assessments for pesticides.
- **Target Completion Date: June 30, 2024**

II. OCSPP's Amended Response to Recommendation 2

Recommendation 2: Issue guidance on using and applying a weight-of-evidence approach in cancer-risk assessments for pesticides.

OIG Response: Please confirm that the update to the CARC SOPs providing additional clarification on the application of WOE to cancer assessments for pesticides will be publicly available and that the application of the WOE in these updated SOPs will be transparently described in individual CARC assessments.

Explanation: OCSPP will update the CARC SOP and include an appendix that describes how CARC uses a WOE approach in pesticide cancer assessments. This appendix will serve as guidance for CARC members on how lines of evidence are considered and integrated in WOE evaluation when determining the carcinogenic potential and appropriate cancer classification for pesticides. OCSPP agrees to make this appendix available to the public, preferably on an existing OPP website. OCSPP feels it is best to make the appendix containing the WOE process publicly available rather than the entire SOP, since SOPs are fluid and are updated frequently. Posting only the WOE appendix will require fewer web updates since the appendix is not expected to change with each SOP update.

- **Proposed Corrective Action:** OCSPP will update the CARC SOP and include an appendix that describes how CARC uses a WOE approach in pesticide cancer assessments. This WOE appendix will be publicly available on an existing OPP public website.
- **Target Completion Date: June 30, 2023**

III. OCSPP's Amended Response to Recommendation 8

Recommendation 8: Conduct an external peer review on the 1,3-dichloropropene cancer-risk assessment.

OIG Response: Since OIG rejected the SciPinion panel as meeting the criteria of an external peer review, OPP offered to potentially conduct a paper peer review to satisfy external peer review recommendation. We are open to this approach; however, we would like OPP to describe in more detail what a paper peer review would entail and how it meets the criteria of external peer review described in our report.

Explanation: As a proposed corrective action, OCSPP agrees that a 'paper' peer review of the SciPinion evaluation of the 1,3-D cancer assessment will serve as a peer review according to the 2015 EPA's Science Policy Council Handbook on Peer Review. As described in the Handbook, an external peer review is a review by non-EPA experts with appropriate knowledge and skills who are independent from the development of the work product. The Handbook further includes examples of external peer review mechanisms, including an ad hoc panel of independent non-EPA experts convened for review and discussion, with each panelist submitting his/her comments separately.

The 'paper' peer review refers to the Peer Review and Risk Assessment Procurement contract, procured by ORD (link to [current contract](#)). Through this procurement, an independent contractor is used to coordinate and conduct of an external peer review that provides a focused, objective evaluation of a document prior to its use by the Agency. As described in the contract's Performance Work Statement, the criteria for the assemblage and conduct of these peer reviews are to follow the 2015 EPA's Science Policy Council Handbook on Peer Review (link to [Performance Work Statement](#) for the Peer Review and Risk Assessment Procurement):

- Consists of individuals holding scientific and/or technical expertise in disciplines relevant to the subject matter being reviewed;
- evaluated for potential conflict of interest;
- is charged with individuals independently reviewing materials and answering charge questions;
- the collective panel engages in discussion and debate, and;
- compiles a comprehensive final report with responses to Agency charge questions.

Specifically, a notable difference from the FIFRA SAP is that the paper peer review process panel can include both US and international experts, allowing for more robust input on specialized scientific topics.

In summary, a ‘paper’ peer review would provide an independent external peer review of the 2020 SciPinion evaluation of the 1,3-D cancer assessment.

- **Proposed Corrective Action:** OPP will obtain an external peer review (that includes a collective panel discussion of individual comments) of the *Peer review of a cancer weight of evidence assessment based on updated toxicokinetics, genotoxicity, and carcinogenicity data for 1,3-dichloropropene using a blinded, virtual panel of experts* [Sean M. Hays, Dawn M. Nelson & Christopher R. Kirman (2020), Critical Reviews in Toxicology, 50:10, 861-884], also referred to as the 2020 peer review conducted by SciPinion.
- **Target Completion Date: June 30, 2024**

cc: All OCSPP DAAs
Ed Messina, OPP
Michael Goodis, OPP
Dana Vogel, OPP
Elissa Reaves, OPP
Marietta Echeverria, OPP
Lauretta Joseph, OIG
James Kohler, OIG
Janet L. Weiner, OCSPP Senior Audit Advisor
Cameo Smoot, OCSPP Audit Liaison

From: [Kohler, James](#)
To: [Smoot, Cameo](#); [Joseph, Laurretta](#); [Weiner, Janet](#); [Reaves, Elissa](#); [Biggio, Patricia](#); [Nolan, Michelle](#); [Echeverria, Marietta](#); [Harwood, Douglas \(Ethan\)](#); [Kiely, Timothy](#); [Costello, Kevin](#); [Goodis, Michael](#); [Louie-Juzwiak, Rosanna](#); [Giles-Parker, Cynthia](#); [Akerman, Gregory](#); [Vogel, Dana](#); [Wilbur, Donald](#); [Phillips, Alli \(She/Her\)](#); [Wilson, Michael](#); [Rowden, Naomi](#); [Parker, Barry](#); [Davidson, Sarah \(She/Her\)](#)
Cc: [Messina, Edward](#); [Stoner, Nora](#); [Hospital, Jocelyn](#); [Rosenblatt, Daniel](#); [Lowit, Anna](#)
Subject: RE: Important -- FLP to last week's OIG/OCSPP mtg on 1, 3-D
Date: Tuesday, August 9, 2022 8:45:54 AM
Attachments: [image001.png](#)

Dear Janet and OPP,

We have discussed your revision to the corrective action to recommendation 1 as well as the remaining unresolved recommendations. Below we summarize the recommendation, our understanding of OPP's current position, as well as our needed clarification/confirmation questions. We are hopeful that the responses to our questions will help us move toward resolution and aid in the development of your response to the final report.

- Recommendation 1: Issue guidance on when and how to conduct the kinetically derived maximum dose approach in cancer-risk assessments for pesticides.

OPP current position: By June 30, 2024, OCSPP will update the OPP public website to state that EPA will rely upon the kinetic guidance currently being developed by the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) as EPA's guidance on when and how to conduct the kinetically-derived maximum dose approach in cancer risk assessments for pesticides.

OIG response: We would like more information to fully understand the corrective action proposed by OPP. (1) If OPP chooses to use the JMPR as its guidance, we would request that OPP update its public website now (vs. in two years) to indicate that, going forward, OPP will adopt the final JMPR's guidance as its own guidance in applying the KMD approach to cancer risk assessments for pesticides. (2) We would also like OPP to confirm that it will not apply the KMD to cancer risks assessments for pesticides until the JMPR guidance is finalized, unless the applications of the KMD to individual cancer assessments are peer reviewed.

- Recommendation 2: Issue guidance on using and applying a weight-of-evidence approach in cancer-risk assessments for pesticides.

OPP current position: OPP will update its CARC SOPs to include more clarity of how it applies the WOE approach to cancer assessments for pesticides.

OIG Response: Please confirm that the update to the CARC SOPs providing additional clarification on the application of WOE to cancer assessments for pesticides will be publicly available and that the application of the WOE in these updated SOPs will be transparently described in individual CARC assessments.

- Recommendation 8: Conduct an external peer review on the 1,3-Dichloropropene cancer-risk assessment.

OPP current position: Since OIG rejected the SciPinion panel as meeting the criteria of an external peer review, OPP offered to potentially conduct a paper peer review to satisfy external peer review recommendation.

OIG Response: We are open to this approach, however, we would like OPP to describe in more detail what a paper peer review would entail and how it meets the criteria of external peer review described in our report.

We are happy to meet to discuss further. Thank you!

Jim

From: Smoot, Cameo <Smoot.Cameo@epa.gov>

Sent: Monday, July 18, 2022 4:08 PM

To: Kohler, James <Kohler.James@epa.gov>; Joseph, Laretta <Joseph.Lauretta@epa.gov>; Weiner, Janet <Weiner.Janet@epa.gov>; Reaves, Elissa <Reaves.Elissa@epa.gov>; Biggio, Patricia <biggio.patricia@epa.gov>; Nolan, Michelle <nolan.michelle@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Harwood, Douglas (Ethan) <harwood.douglas@epa.gov>; Kiely, Timothy <Kiely.Timothy@epa.gov>; Costello, Kevin <Costello.Kevin@epa.gov>; Goodis, Michael <Goodis.Michael@epa.gov>; Louie-Juzwiak, Rosanna <Louie-Juzwiak.Rosanna@epa.gov>; Giles- Parker, Cynthia <Giles-Parker.Cynthia@epa.gov>; Akerman, Gregory <Akerman.Gregory@epa.gov>; Vogel, Dana <Vogel.Dana@epa.gov>; Wilbur, Donald <Wilbur.Donald@epa.gov>; Phillips, Alli (She/Her) <phillips.alli@epa.gov>; Wilson, Michael <Wilson.Michael@epa.gov>; Rowden, Naomi <Rowden.Naomi@epa.gov>; Parker, Barry <Parker.Barry@epa.gov>; Davidson, Sarah (She/Her) <davidson.sarah@epa.gov>

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Subject: RE: Important -- FLP to last week's OIG/OCSPP mtg on 1, 3-D

James,

Thank you for the update. We look forward to reviewing the final report.

Cameo G. Smoot
Audit Coordinator

Regulatory Support Branch

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