

From: [Isanhart, John P](#)
To: [McChesney, Gerry](#)
Subject: review of salamander toxicity study report
Date: Tuesday, December 12, 2017 2:21:53 PM
Attachments: [QA-2688 Final Report Salamander Anticoagulant Hazards Assessment_JI review.docx](#)
Importance: High

Gerry,

My review is attached. Please feel free to send my edits and comments to Gary as you see fit. I did not attempt to change the meaning of anything that Gary wrote. As we discussed, this draft report requires major revisions prior to being sent to an external reviewer. I do not know USDA-NWRC's internal peer-review process, or if there even is one required, but I recommend someone from NWRC review this document and provide significant feedback prior to this going to an external reviewer. I spent significantly less effort towards the end of the paper making editorial comments. This report should be very close to journal publication quality, in my opinion, and it still has a ways to go.

There are some very basic, yet important points to be made that are highlighted in my comments. Among those, they include:

- 1) Some acknowledgment of baseline salamander health (e.g., stable weight prior to study initiation) needs to be made.
- 2) There are certainly sublethal effects that for some reason are not acknowledged. Skin sloughing and sores are sublethal effects, in my opinion. It appears even just the bait formulation alone (w/ no rodenticide) poses some (albeit minimal) hazard to salamanders.
- 3) There's no discussion of if or how the salamander dermal exposure was standardized. E.g, how many pellets or total mass of pellets placed in the cage. I understand they tried to maximize exposure, but this point matters potentially.

The analytical report needs to be included as an appendix.

Also, whenever a cleaned-up version is available, Barbara's review will be important.

Let me know if there's anything else I can do.

Cheers,

John

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