Peer Review Charge for

1,2-Diphenylhydrazine Toxicological Profile - Draft for Public Comment

This toxicological profile is an update of a previous profile on this substance published in 1990. It also includes text from an Addendum published in 2009. This update has focused on updating Chapter 2 on Health Effects and integrating information primarily on uses and approvals. It also details the development of a Minimal Risk Level (MRL) for intermediate-duration oral exposure when there were no MRLs in the 1990 profile. Furthermore, this profile has under gone a systematic review of the literature, as described in Appendix C.

Thus, we would like for you to focus on specific chapters noted below, including the health effects section (Chapter 2) and the MRL derivation.

CHARGE TO REVIEWER:

CHAPTER 1:

• Does Chapter 1 adequately summarize the published literature regarding health effects for this substance?

CHAPTER 2:

• Does Chapter 2 adequately reflect the published literature regarding health effects for this substance?

MRLs: We would like you to focus on the current data assessment which resulted in the derivation of the new MRL.

- Intermediate-Duration Oral MRL: A newly developed intermediate-duration oral MRL of 0.05 mg/kg/day was derived based on a NOAEL of 4.80 mg/kg/day for hepatic effects in rats exposed to 1,2diphenylhydrazaine in the diet for 13 weeks (Dodd et al. 2012). This NOAEL was divided by an uncertainty factor of 100 (10 for animal-to-human extrapolation and 10 for human variability).
 - o Is the principal study cited for this derivation properly interpreted?
 - Are the uncertainty factors appropriate and are they applied correctly?
 - Do you agree that the derivation of the new intermediate-duration oral MRL of 0.05 mg/kg/day is valid? Explain.
 - If you disagree, please propose an appropriate intermediate-duration oral MRL and give your rationale.
 - Is the final value of the MRL acceptable?
- Are you aware of any studies that are not included that may be relevant in the derivation of other inhalation or oral MRLs for this chemical?
- Please comment on any aspect of our MRL database assessment that you feel should be addressed.

CHAPTER 5: We would like you to review text mainly for citations more recent than 1990. Those primarily address uses and approval for use.

CHAPTER 7: We would like to know your thoughts on the regulations and guidelines that are presented and any that should be added or removed.

- Are you aware of any additional regulations or guidelines that we should add? Please provide citations.
- Are there any that should be removed? Explain.

APPENDIX A:

Please address the MRL worksheet based upon the questions provided above about the newly derived MRL.

APPENDIX B:

Please provide comments about the process utilized in this section.

APPENDIX C:

Please provide comments about the systematic literature review process presented in this section.