DTSC Green Ribbon Science Panel

July 17-18, 2017

Background document

This document provides background on topics to be discussed at the July meeting of the Department of Toxic Substance Control Green Ribbon Science Panel. Topics are focused on supporting the implementation of the Safer Consumer Products regulations.

1. Panel member expertise review

You will each be given an opportunity to introduce your panel colleagues and DTSC staff to current work you're doing with a nexus to SCP. We're asking that you give this some thought before the panel meets. We will allow each member 7-10 minutes to discuss relevant work and answer any clarifying questions. We have a wide variety of expertise on the panel and the brief bios that have been shared publicly are not indicative of the breadth and depth of your efforts. These will give staff a better understanding of opportunities for you to inform our work. These are not formal presentations and we are asking you not to use slides.

Please consider the following questions as you prepare your comments:

- Do you have active work on SCP-related topics? If so, please describe.
- Are you participating in any relevant industry initiatives (e.g., ZDHC, EICC, GC3 competition for new preservatives for personal care & household products, supply chain transparency efforts)?
- What professional meetings or scientific conferences do you attend related to green chemistry, alternatives assessment, chemicals safety, product development, life cycle assessment, emerging toxicology, exposure analysis, analytical methods, etc.? This can help us reach out to you if we are unable to send staff to relevant conferences and will also help us with scheduling and planning GRSP meetings.
- Are you active in any professional organizations that may have relevance to SCP?
- Would you like to educate DTSC staff about any of your current or past expertise through seminars or other means?

2. Use of models and predictive tools to address hazard or exposure data gaps

Modeling methods, such as, read-across, QSAR, ConsExpo, or EpiSuite. DTSC has included general information (e.g., basic concepts, examples of tools and models, limitations and cautionary statements on use for regulatory purposes, references for more detailed guidance) on these types of approaches to address hazard or exposure data gaps in the Guide. The Guide cannot prescribe criteria for use nor dictate one single approach to interpreting model results. Stakeholders have

requested that DTSC provide additional clarity on 1) the criteria for use of modeling methods to address data gaps, 2) applicability and limitations associated with different models, and 3) how to interpret differing results from different models.

a. What predictive tools have you used?
b. What criteria have you used for tool selection? How have you determined the applicability and limitations of any given model?
c. What expertise was needed to use the tool(s) (area of expertise or level of expertise)? What was the required investment (training, tool cost, etc.)? Are there barriers to tool use – complexity, user friendliness?
d. Have you ever used multiple models for the same question and obtained conflicting results? How did you interpret the conflicting results?
e. What are the associated confidence intervals?
f. How have you communicated any limitations of model results?
g. What underlying assumptions do you consider particularly critical for the tool?
h. The recommended references for detailed guidance and best practice on read-across and QSAR approach include: 1) *The European Chemicals Agency Read-Across Assessment Framework (RAAF)*; (2) *the European Center for Ecotoxicology and Toxicology of Chemicals (ECETOC) Technical Report on Category Approaches, Read-Across, and QSAR*; (3) *the Organization for Economic Co-operation and Development (OECD) Guidance on Grouping of Chemicals*; (4) *US EPA High Production Volume (HPV) Challenge Program*, and (5) *OECD Manual for the Assessment of Chemicals*. Do you recommend any additional references for the Guide to inform responsible entities about practical use, applicability, limitations and uncertainties of read-across and QSAR approaches?
i. Do you have any other technical and scientific recommendations or feasible, practical strategies that can be used to advise users of the Guide whether or how to use these approaches to address data gaps for SCP AA purposes?