

DTSC Green Ribbon Science Panel

February 12-13, 2018

Background Document

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

Topic 1. Alternatives Analysis Example Discussion

DTSC is in the process of evaluating previously-completed alternatives assessments. This exercise is intended to allow DTSC to better understand the current example alternatives assessments available to stakeholders and define a process for DTSC to evaluate AAs submitted for Priority Products. DTSC has highlighted ten examples (see attached document), summarized general conclusions for each example, and summarized the strengths of each AA with regard to the requirements of the California AA process. Please note that, for the most part, these examples were developed to meet objectives other than the SCP regulatory requirements and, as such, SCP is analyzing them for their strengths and not to highlight deficiencies.

DTSC is seeking input from the panel on these examples as they relate to the Safer Consumer Products (SCP) program. We ask each panel member to pay extra attention to those examples whose strengths most closely align with the member's expertise. E.g., if a panel member is highly experienced in assessing economic impacts, please more carefully review examples that were selected for their economic content. Specifically:

Strength of example:

- Does the panel agree that the example is strong in the area identified? If not, why not?
- If so, what makes it a strong example?
- How could it be even stronger?
- Is the panel familiar with any assessments in the strength area that would serve as better examples?
- Did the example adequately support any conclusions in the report?

DTSC feedback:

- Did DTSC correctly assess the example?
- What was missed?
- Are there indications that we need certain expertise to correctly review the examples? Does the panel have suggestions about how we might cover the diversity of areas required?
- What can DTSC do to facilitate development of example assessments that better address the California requirements, i.e., better coverage of all California AA elements and more thorough analyses?
- Are there recommendations for how the program should follow up on this example?

Communication with stakeholders:

- What aspects of our evaluation need to be conveyed to stakeholders?
- What is the best means of presenting our findings to stakeholders?

Topic 2. Priority Product Work Plans: Reflection on 2015-2017 and looking ahead to 2018-2020

2015-2017 Priority Product Work Plan

DTSC has spent the last two years implementing our [first Priority Product Work Plan](#) (Work Plan). The Work Plan was successful at setting the agenda for the SCP program and providing market signals.

Briefly, in selecting product categories for the Work Plan, we considered five policy objectives and priorities for categories that:

- Provide clear pathways for exposure to one or more Candidate Chemicals;
- Contain chemicals that have been detected in biomonitoring studies;
- Contain chemicals that have been observed in indoor air and dust studies;
- May impact children or workers; or
- Contain chemicals that may adversely impact aquatic resources or that have been observed through water quality monitoring.

To address these policy priorities, we highlighted seven product categories, including:

- Beauty, personal care and hygiene products
- Building products: painting products, adhesives, sealants, and flooring
- Household, office furniture and furnishings
- Cleaning products
- Clothing
- Fishing and angling equipment
- Office machinery (consumable products).

The implementation of the Work Plan included a broad range of activities, including:

- A webinar was conducted to provide an overview of DTSC's progress towards Priority Product selection and outlined opportunities for input on November 15, 2016.
- A public workshop on Perfluoroalkyl and Polyfluoroalkyl Substances in Carpets, Rugs, Indoor Upholstered Furniture, and Their Care and Treatment Products was held on January 31, 2017.
- A public workshop on Potential Aquatic Impacts and Continued Uses of Nonylphenol Ethoxylates and Triclosan was held on February 8, 2017.
- A public workshop on Potential Health and Safety Impacts of Chemicals in Nail Products was held on March 2, 2017.
- A public workshop on Lead-acid Batteries and Alternatives was held on November 6, 2017.

We have reflected on our successes and challenges related to implementation of the 2015-2017 Work Plan, highlighted below. While the implementation of the 2015-2017 Work Plan will not be the focus of this GRSP meeting, we welcome any insight from the panel on these reflections.

Implementation Successes:

- Stakeholders were engaged and provided helpful information when requested at public meetings of when contacted directly. We received information from NGOs, academics and manufacturers.
- Prioritization process generated a number of strong product subcategories and product-chemical combinations that are either currently being pursued, or ready for assessment when resources become available.
- Manufacturers and industry associations for products other than the ones for which we actively solicited public input responded to the Work Plan and, in some cases, innovated to look for safer alternatives. For example:
 - The Resilient Floor Covering Institute (RFCI) informed us its members phased out ortho-phthalates in all their products in favor of terephthalates, in direct response to the mention of ortho-phthalates as an example chemical for the building products category;
 - In response to inclusion of adhesives in the building products category, the Adhesives and Sealants Council invited SCP to provide an overview of the framework regs and 2015-2017 Work Plan at its 2016 annual conference;
 - Colgate-Palmolive requested several meetings to discuss its removal of triclosan from all but one of its personal care products, its rationale for continuing to use the chemical in toothpaste, and reasons why it felt SCP should not name toothpaste as a Priority Product.
- The Work Plan was useful for framing the discussion for our November 2016 broader Work Plan implementation [webinar](#) and more focused [2017 webinars and workshops](#).

Implementation Challenges:

- Creating a process for scoping and prioritizing products and chemicals was more time consuming than anticipated.
- We overestimated the number of products we could reasonably expect to announce during the three-year work period.
- Up to date product ingredient information continues to be a challenge and was unavailable for most product categories. We have started looking to non-public resources to fill these information needs.
- For broader product categories, the large number of Candidate Chemicals and products contained within made category research unwieldy and hindered prioritization. It was impossible to do a systematic, comprehensive evaluation of the category. In some instances, categories had to be narrowed down (e.g., based on data availability, policy priorities, or staff expertise) to enable scoping on a reasonable time frame.
- The complexity of some supply chains (e.g., clothing) hindered consideration of certain product-chemical combinations.
- We ran into challenges identifying the correct product (e.g., upholstered furniture vs. fabric/textiles for upholstered furniture) and the respective manufacturers vs. assemblers.
- Source identification back to a specific product was challenging, especially for those Candidate Chemicals impacting the aquatic environment.
- Some of the policy priorities were worded more as considerations or factors than actual statements of policy, and didn't help narrow down the product-chemical possibilities.

2018-2010 Priority Product Work Plan

Recognizing the challenges associated with implementing the policy priorities from the 2015-2017 Work Plan (highlighted above), the 2018-2020 Work Plan has clear, more easily actionable goals and policy priorities (see attached Draft 2018-2020 Priority Product Work Plan). These goals are:

- To protect **children** from exposures to harmful chemicals, especially carcinogens, mutagens, reproductive toxicants, neurotoxicants, developmental toxicants, and endocrine disruptors.
- To protect **California's valuable and limited water resources and aquatic ecosystems** from chemicals contamination via wastewater or storm water.
- To protect Californians from exposure to harmful chemicals found in the **indoor environment**.
- To address exposures from harmful chemicals that **migrate from consumer products into food**.

These goals will be used to select Priority Products from the product categories listed below. We believe the additional clarity on policy priorities will accelerate decision making under the new Work Plan. Changes, additions and removals from the 2015-2017 Work Plan have been indicated by underline or strikethrough. The product categories were selected based on the 2015-2017 Work Plan, [stakeholder input](#), and the goals listed above. Some categories were kept to allow for continuation of work that has already started.

- Beauty, personal care, and hygiene products
- Cleaning products
- Household, school, and work place furnishings and décor
- Building products and materials used in construction and renovation
- Consumable office, school, and business supplies
- Food packaging
- Lead-acid batteries
- ~~Clothing~~
- ~~Fishing and angling equipment~~

As we work to finalize and then implement our newest Work Plan, we seek feedback from the GRSP panel on the topics below as they relate to the 2018-2020 Priority Product Work Plan.

- Are the product categories clearly and sufficiently defined and aligned with the stated policy objectives?
- What priorities, including specific hazard endpoints, chemicals, chemical functions, etc., should we pursue?
- What are the anticipated challenges in identifying specific products within the categories?
- What are the anticipated data gaps and information needs associated with these product categories? Are there any recommendations for closing any noted data gaps?
- Are there prioritization methodologies or rubrics that should be applied to our implementation of the Work Plan, e.g., CMP Prioritization.¹

¹ <http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=A10191AD-1#s4>

Topic 3. Setting a Research Agenda

The precautionary foundation of the SCP regulations affords a great deal of latitude to make decisions in the face of data gaps. As outlined by Kriebel et al.,² precautionary decision-making entails “taking preventive action in the face of uncertainty; shifting the burden of proof to the proponents of an activity; exploring a wide range of alternatives to possibly harmful actions; and increasing public participation in decision making.” Although the regulations and a precautionary approach allow DTSC to act when there’s uncertainty, we need information to prioritize among the breadth of products and chemicals in commerce; we are required to demonstrate that we’ve met regulatory criteria for exposure and hazard; and responsible entities must have enough information on which to base a decision about a preferred alternative.

Emerging data sources and tools have direct relevance to SCP – high throughput screening and computational toxicology, wearable monitors of chemical exposure, non-targeted analytical methods, etc. Both DTSC and the regulated community stand to benefit if research in these areas generates more data and information to inform decisions and support the evaluation of information against the SCP regulatory criteria.

We would like to leverage our influence to engage the research community on research topics that would address specific program and stakeholder needs and generate information needed to implement the regulations. The time for this discussion in the meeting is insufficient to fully address the questions below, but serves as a jumping off point for continued discussions to be revisited at future GRSP meetings.

Questions for the panel:

- What are the major research areas that SCP should focus on advancing to ensure success for our program and stakeholders? Examples include:
 - exposure science topics;
 - New Approach Methodologies (NAMs)³;
 - economics; and
 - ecological hazard assessment.
- How can DTSC most efficiently and effectively leverage its power to influence the research agenda without directly funding research projects? Does this approach change when considering multidisciplinary topics?
- Are there specific research projects that DTSC should consider funding or contributing to, given modest available funds?

² Kriebel D, Tickner J, Epstein P, et al. The precautionary principle in environmental science. *Environmental Health Perspectives*. 2001;109(9):871-876.

³ From the [Interagency Coordinating Committee on the Validation of Alternative Methods](#), NAMs is a “broadly descriptive reference to any non-animal technology, methodology, approach, or combination thereof that can be used to provide information on chemical hazard and risk assessment. These new approaches include integrated approaches to testing and assessment (IATAs), defined approaches for data interpretation, and performance-based evaluation of test methods.”

- How can DTSC facilitate dissemination of research to relevant stakeholders, i.e., how do we help responsible entities stay abreast of the latest research in academia?
- How can DTSC most efficiently stay up to date on the progress of research across a large number of disciplines?