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We are pleased to offer these brief comments on the Safer Consumer Products Draft Priority Product Work Plan. Our comments are based on current work of the Massachusetts Toxics Use Reduction Act (TURA) program, and are intended to highlight potential areas of connection between TURA program activities and those under consideration in California.

Product category screening approaches. Similar to the approach taken at DTSC, the TURA program has employed more than one approach to consider chemicals and categories for prioritization. Specifically, the TURA program has faced questions of this kind in determining which chemicals to prioritize for possible designation as Higher Hazard Substances (HHS) under TURA. (An HHS designation applies to a chemical, not a chemical-product pairing. Policy analyses developed as background for HHS designations can be found at http://www.turi.org/TURI_Publications/Toxics_Use_Reduction_Policy_Analysis/Higher_Hazard_Substances_Policy_Analyses.)

- **Hazard:** The TURA Science Advisory Board (SAB) makes recommendations primarily on the basis of hazard. If the SAB considers a substance to be toxic or hazardous, it recommends the substance for inclusion on the TURA list regardless of whether significant exposure scenarios have been identified. Similarly, the SAB recommends substances for higher or lower hazard status based on their inherent hazard, not based on exposure scenarios.
- **Exposure:** Under TURA, exposure is considered to be a secondary consideration. Once chemicals have been listed and/or categorized based on hazard, the potential for significant exposure may be a reason to prioritize one chemical above another for allocation of scarce program resources.
 - Exposure information can be a basis for additional concern about a substance, but not for overlooking hazard. For example, if a substance is highly hazardous, the fact that it is used within a closed system does not alter the hazard assessment.

- Exposure scenarios may also be taken into account in the policy analysis phase of the decision-making process. For example, in selecting substances to propose for a higher hazard designation, the Institute may propose prioritizing a substance with known exposure scenarios of concern.
- Functional use: In recent work to categorize and prioritize chemicals for HHS designation, the TURA program has found it useful to employ functional use information, particularly to avoid regrettable substitutions. We would be happy to share more information about this process with DTSC if that would be helpful. TURI also considers functional use when developing alternatives assessments; it is particularly helpful in identifying alternatives beyond chemical substitution.

Product categories of interest

Beauty, personal care and hygiene products

- This is not a core focus of TURA program policy development because of the parameters of the program's authority. However, the program has devoted significant time to investigating some chemicals that are found in personal care products (e.g. D5 siloxane) based on the fact that they may be used as alternatives in industry to some chemicals the program has already designated as HHS.
- The TURA program also supports municipalities, community organizations, and university researchers in investigating safer alternatives for hair and nail products.
- In the process of this work, the TURA program has identified important gaps related to the lack of safer alternatives currently on the market, especially for nail products.
- As noted in the Work Plan, beauty, personal care and hygiene products are applied directly to the body and present a significant source of exposure concerns.

Building products and household, office furniture and furnishings

- The TURA program has engaged directly with issues related to Higher Hazard Substances used in the manufacture of certain building products, including formaldehyde-based resins in architectural paper, adhesives containing formaldehyde, methylene chloride, or n-propyl bromide, and paint strippers containing methylene chloride.
- The TURA program has proposed regulations to designate toluene diisocyanate (TDI) as a HHS. If these regulations are promulgated in 2014, the designation will be effective as of January 1, 2015. A HHS designation lowers the threshold for coverage under TURA to 1,000 lb/year for businesses in TURA-covered sectors using TDI. The TURA Science Advisory Board is now beginning to examine the scientific data on chemicals in the diisocyanates category (as defined by US EPA under EPCRA, and including MDI and polymeric MDI) to determine whether the entire category deserves designation as HHS. The diisocyanates are of particular concern to the TURA program due to their role in occupational asthma, and as potent sensitizers.

- TURI considers flame retardants in furnishings and other products to be a significant source of on-going concern, and has sponsored university research into safer alternatives. Many of these flame retardants are not yet listed under TURA, making it impossible to determine the quantities in which they may still be in use in Massachusetts manufacturing. There are also significant concerns related to potential adverse substitutions as newer flame retardants are adopted in place of earlier generations of chemicals.
- The TURA program and its Science Advisory Board is also actively considering opportunities to group chemicals by chemical structure, as a means to more efficiently address the challenges presented by the variety of halogenated compounds, for example.
- Other subcategories of building products to potentially consider include carpets (which may be treated with perfluorinated compounds, creating potential exposures for children); carpet padding (which may contain flame retardants and use adhesives); and insulation. Spray-foam insulation containing diisocyanates is a particular concern because of the increased exposure to workers applying the product in homes and commercial buildings.

Cleaning products

- The TURA program works actively to facilitate the adoption of safer alternatives to toxic chemicals in cleaning applications. This includes work with janitorial cleaning businesses and workers, as well as work with janitorial cleaning product formulators.
- Of the chemicals listed in in Table 4:
 - Hydrogen fluoride (HF) is listed under TURA, and regulations have been proposed to designate HF as a HHS.
 - Several phthalate esters are reportable under TURA, and MassDEP is considering a policy change that would result in more phthalate esters being reportable.
 - TURI's Surface Cleaning Lab has significant experience in identifying safer alternatives for hazardous cleaning chemicals, and would be pleased to provide more detailed information on this topic.

Fishing and angling equipment

- Lead fishing tackle has been a focus of several TURA program projects. This is an example of a product category that is a significant source of hazard, and relatively straightforward to address. Lead fishing tackle is not only a significant source of water fowl deaths, it also creates opportunities for childhood lead exposure when children handle fishing equipment.
 - TURI's 2006 Five Chemicals Alternatives Assessment Study considered fishing sinkers (and wheel weights) as a priority use of lead.
 - TURI has provided grants for community projects focused on promoting the use of safer alternatives to lead in fishing sinkers (http://www.turi.org/Our_Work/Home_Community/Lead_in_Fishing).

Another broad product category that the TURA program has prioritized is electronic products and equipment (including wire and cable), which are significant sources of heavy metals, flame retardants, plasticizers, and other toxic chemicals.

In summary, the product categories and sample chemicals outlined in the work plan are consistent with many of the priorities that have been identified by the TURA program.

Please do not hesitate to contact us with any follow-up questions.