



California Environmental Protection Agency

Department of Toxic Substances Control

**Recommendation on Need for a
Multimedia Evaluation of the
Safer Consumer Products Regulations**

REPORT TO THE CALIFORNIA ENVIRONMENTAL POLICY COUNCIL

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I. BACKGROUND AND REPORT OVERVIEW

In 2008, the enactment of Assembly Bill 1879 (Stats. 2008, Ch. 559) established Article 14 within Chapter 6.5 of Division 20 of the Health and Safety Code, including sections 25252 and 25253. These two sections in particular require the Department of Toxic Substances Control (DTSC) to adopt regulations to:

- 1) Establish a process to identify and prioritize those chemicals or chemical ingredients in consumer products that may be considered as being chemicals of concern.
- 2) Establish a process for evaluating chemicals of concern in consumer products, and their potential alternatives, to determine how best to limit exposure or to reduce the level of hazard posed by the chemical of concern. This process must include an evaluation of the availability of potential alternatives and potential hazards posed by those alternatives, and an evaluation of critical exposure pathways.
- 3) Specify the range of regulatory responses that DTSC may take following the completion of the alternatives analysis.

DTSC is proposing to adopt the Safer Consumer Products regulations to implement Health and Safety Code sections 25252 and 25253 as well as companion sections within Article 14. As required by the statute, in developing these regulations, DTSC has consulted with other appropriate State agencies, and has conducted public workshops.

With one important exception discussed below, Health and Safety Code section 25252.5 requires DTSC to prepare for the regulations, and submit to the Environmental Policy Council, a multimedia life cycle evaluation. When an evaluation is required, it must identify and evaluate any significant adverse public health or environmental impacts that may result from the production, use or disposal of a consumer product or consumer product ingredient. The evaluation must, at a minimum, address impacts associated with: air pollutant emissions; surface water, groundwater, and soil contamination; disposal or use of byproducts and waste materials; worker safety and impacts to public health; and other anticipated impacts to the environment.

Subdivision (f) of Health and Safety Code section 25252.5 provides that a multimedia life cycle evaluation is not required if the Environmental Policy Council, following an initial evaluation of the proposed regulations, conclusively determines that the regulations will not have any significant adverse impact on public health or the environment.

Chapter II of this report presents the analysis that demonstrates that the proposed Safer Consumer Products regulations will not have any significant adverse impact on public health or the environment. Chapter III provides DTSC's recommendation to the Environmental Policy Council that is based on this analysis. Chapter IV presents a summary of the proposed regulations.

II. ANALYSIS

This chapter addresses the question that is before the Environmental Policy Council: Can the Council conclusively determine, following an initial evaluation of DTSC's proposed Safer Consumer Products regulations, that the regulations will not have any significant adverse impact on public health or the environment?

The proposed regulations establish a process by which chemicals or chemical ingredients in products may be identified and prioritized for consideration as being chemicals of concern. Further, the regulations establish a process by which chemicals of concern in products, and their potential alternatives, are evaluated to determine how best to limit exposure or reduce the level of hazard posed by a chemical of concern. The regulations also specify actions that DTSC may take following the completion of the alternatives analysis.

Prior Environmental Policy Council reviews of multimedia life cycle evaluations, as well as findings that such an evaluation is not required, have focused on regulations pertaining to specific chemicals, such as fuel additives. These prior reviews and findings were, therefore, based on the adverse impacts posed by the specific chemicals and how those impacts were mitigated by the regulatory requirements being proposed. DTSC's proposed Safer Consumer Products regulations, in contrast, do not focus on any specific product-chemical combination. Rather, these regulations implement the statutory directive to establish a multi-step process for chemical and product prioritization, alternatives analysis, and imposition of safeguarding regulatory responses.

The California Green Chemistry Initiative Final Report (December 2008) recommends six strategies to implement a process intended to reduce the use of hazardous substances. This preemptive strategy seeks to reduce the use of the toxic substances in products and industrial processes before they contaminate the environment and human beings. A key component of the Green Chemistry Initiative focuses on encouraging the acceleration of the quest for safer products. The creation of a scientifically-based decision-making framework for the evaluation of chemicals of concern in products sold in California may lead some manufacturers of these products to choose to use less toxic alternatives. The Initiative calls for this process to use a

lifecycle approach to regulation, whereby a comprehensive alternatives analysis will be performed to identify safer alternatives to chemicals while also considering different hazard traits and environmental endpoints alongside production, performance, and cost factors. The proposed regulations establish the process envisioned by this Initiative.

Chapter IV of this report provides a detailed summary of the proposed regulations. The analysis presented in this chapter discusses the key components of the regulations that support the recommendation set forth in Chapter III. Specifically, Section A below explains in further detail the process that will be used to identify and prioritize chemicals and products for which an alternatives analysis must be performed. Section B provides the comprehensive list of multimedia impacts that will be considered as part of the alternatives analysis process, and further explains how that process will operate. Section C describes the regulatory responses available to DTSC following the completion of an alternatives analysis.

A. Chemical and Product Identification and Prioritization Process

In response to the directives in Health and Safety Code sections 25252 and 25253, and the overarching goals of the “Green Chemistry” statutes embodied in Health and Safety Code section 25255(a), the regulations establish a science-based iterative process for the identification and prioritization of chemicals and product-chemical combinations. Health and Safety Code section 25252(a) requires DTSC to adopt regulations to establish a process to identify and prioritize those chemicals or chemical ingredients in consumer products that may be considered a Chemical of Concern. In accordance with Health and Safety Code section 25253(a)(1), the regulations then establish a process for evaluating Chemicals of Concern in prioritized consumer products, and their potential alternatives, to determine how to best limit exposure or reduce the level of hazard posed by a Chemical of Concern. Health and Safety Code section 25255(a) states that the goals of the statute are “significantly reducing adverse health and environmental impacts of chemicals used in commerce, as well as the overall costs of those impacts to the state’s society, by encouraging the redesign of consumer products, manufacturing processes, and approaches.”

Health and Safety Code section 25254 required DTSC to establish a Green Ribbon Science Panel (GRSP) to advise DTSC in the adoption of these regulations. The options and opinions provided by the GRSP members helped inform DTSC’s creation of a process for identification and prioritization of chemicals and products. The processes proposed by the regulations in Articles 2 and 3 to identify and prioritize chemicals and products require two steps. First, an identification process produces a list of Candidate Chemicals. Secondly, an identification and prioritization process will yield a list of prioritized products that contain Candidate Chemicals and that are listed as Priority

Products. The Candidate Chemicals that form the basis for listing a product as a Priority Product are the Chemicals of Concern for that product. It is the list of Priority Products that will be subject to alternatives analyses.

The regulations will establish, as of their effective date, an immediate list of approximately 1,200 Candidate Chemicals. This list represents a compilation of 23 existing authoritative body lists that: (i) list chemicals on the basis of exhibiting at least one of eight hazard traits (carcinogenicity, reproductive toxicity, mutagenicity, developmental toxicity, respiratory sensitivity, endocrine disruption, neurotoxicity, and/or persistent bioaccumulative toxicity); or (ii) list chemicals on exposure indicator lists for water quality, air quality, or biomonitoring. Subsequently, the product prioritization process will create a list of product-chemical combinations that meet the following criteria: (i) there must be potential exposure to the Candidate Chemical(s) in the product; and (ii) there must be the potential for one or more exposures to contribute to or cause significant or widespread adverse public health and/or environmental impacts.

As required by Health and Safety Code sections 25252 and 25253, Article 3 of the proposed regulations will establish the process to prioritize Chemicals of Concern in consumer products as Priority Products. DTSC may list as Priority Products those products that are determined to be of high priority based on an evaluation of the potential adverse public health (including worker health) and environmental impacts, exposures, and waste and end-of-life effects associated with the product, the availability of substantiating information, other regulatory programs that regulate the product or Candidate Chemical, and the availability of safer alternatives that are functionally acceptable and technically and economically feasible.

B. Alternatives Analysis Process

Health and Safety Code section 25253(a)(2) requires the regulations to establish a process that includes an evaluation of the availability of potential alternatives and potential hazards posed by those alternatives, as well as an evaluation of critical exposure pathways. The proposed regulations implement this strategy through the alternatives analysis (AA) process in Article 5. The process is required to include lifecycle assessment tools that take into consideration, among other factors:

- Product function or performance;
- Useful life;
- Materials and resource consumption;
- Water conservation;
- Water quality impacts;
- Air emissions;
- Production, in-use and transportation energy inputs;

- Energy efficiency;
- Greenhouse gas emissions;
- Waste and end-of-life disposal;
- Public health impacts, including potential impacts to sensitive subpopulations;
- Environmental impacts; and
- Economic impacts.

These criteria address the lifecycle impacts (i.e., from raw materials extraction through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling) associated with the Priority Product or any alternatives considered. The AA process is divided into two stages. In the first stage, a Preliminary AA Report identifies potential alternatives to the Priority Product and eliminates any alternative chemicals that pose greater aggregate or cumulative public health and/or environmental impacts than the Chemical(s) of Concern in the Priority Product. In the second stage, a Final AA Report requires the collection and use of available information and tools to evaluate and compare the impacts posed by the alternatives being evaluated. This stage simultaneously addresses the lifecycle criteria listed above. The regulations do not require that a specific alternative be selected, but instead embody the goals of Health and Safety Code section 25255(a) by creating a process that will lead to the reduction of adverse health and environmental impacts caused by chemicals used in commerce by encouraging the redesign of consumer products and manufacturing processes.

C. Regulatory Responses

Health and Safety Code section 25253(b) requires the regulations to specify the range of regulatory responses that DTSC may impose following the completion of an AA, including, but not limited to, any of the following actions:

1. Not requiring any action;
2. Imposing requirements to provide additional information needed to assess a Chemical of Concern and its potential alternatives;
3. Imposing requirements on the labeling or other type of consumer product information;
4. Imposing a restriction on the use of the Chemical of Concern in the consumer product;
5. Prohibiting the use of the Chemical of Concern in the consumer product;

6. Imposing requirements that control access to or limit exposure to the Chemical of Concern in the consumer product;
7. Imposing requirements for the manufacturer to manage the product at the end of its useful life, including recycling or responsible disposal of the consumer product;
8. Imposing a requirement to fund green chemistry challenge grants where no feasible safer alternative exists; and
9. Any other outcome DTSC determines accomplishes the requirements of the authorizing statute.

DTSC anticipates that many of the listed regulatory responses when imposed will need to be customized on a case-by-case basis in light of the nature of, and the uses of, the individual product. Therefore, the regulations include a process for issuing a proposed regulatory response determination for public review and comment before DTSC makes its final regulatory response determination. In specifying the criteria for and the operation of the regulatory responses, DTSC has sought to effectuate the legislative intent embodied in the following sections of the authorizing statute:

- Health and Safety Code section 25253(a)(1) sets forth the purpose of the alternatives analysis process, which is the step leading to the imposition of a regulatory response, as “to determine how best to limit exposure or to reduce the level of hazard posed by a Chemical of Concern.”
- Health and Safety Code section 25255(a) states that the overall goal of the authorizing statutes is “significantly reducing adverse health and environmental impacts of chemicals used in commerce, as well as the overall costs of those impacts to the state’s society, by encouraging the redesign of consumer products, manufacturing processes, and approaches.”

D. Conclusion

As this discussion makes clear, the proposed regulations establish the process by which DTSC will identify and prioritize chemicals or chemical ingredients in products. This process will be based on many factors including, but not limited to, the identification and evaluation of any significant adverse impact on public health (including worker health) or the environment, including air, water, or soil, that may result from the production, use, or disposal of a consumer product or consumer product ingredient. The proposed regulations further establish a process that will then use these factors, among others, to determine which products should undergo alternatives analyses. The

AA process will evaluate safer alternatives to Chemicals of Concern in Priority Products in order to limit adverse public health and environmental impacts caused by exposure to those chemicals in consumer products. Whereas the regulations do not themselves identify any specific product-chemical combination that will be regulated, any attempted multimedia life cycle evaluation of the regulations as required by Health and Safety Code section 25252.5(a) will not result in any meaningful information or analysis for the Environmental Policy Council to consider.

III. RECOMMENDATION

DTSC staff recommends that the Environmental Policy Council concur with DTSC's finding and conclusively determine that the proposed Safer Consumer Products Regulations will not have any significant adverse impact on public health or the environment.

IV. SUMMARY OF SAFER CONSUMER PRODUCTS REGULATIONS

This section provides an overview of the key components of DTSC's proposed regulations.

A. Applicability

The regulations apply to all consumer products placed into the stream of commerce in California, and all chemicals that exhibit a hazard trait and are present in these consumer products; EXCEPT for those products exempted by the statute. The statutorily-exempted products are: prescription drugs and devices; dental restorative materials; medical devices; the packaging associated with prescription drugs and devices, dental restorative materials and medical devices; food; and pesticides. In addition, the regulations provide that if DTSC determines that one or more existing regulatory programs – in combination – provide the same or greater level of public health and environmental protection regarding a product as would be provided by the application of the regulations, then these regulations do not apply to that product.

B. Four-Step Process

The regulations provide for a four-step continuous, science-based, iterative process to identify safer consumer product alternatives. Those four steps are:

- DTSC – The regulations establish an immediate list of Candidate Chemicals (~1,200) based on the work already done by other authoritative organizations,

and specify a process for DTSC to identify additional chemicals as Candidate Chemicals. (See Chapter IV.F. for further details.)

- DTSC – The regulations require DTSC to evaluate and prioritize Candidate Chemical-product combinations to develop a list of “Priority Products” for which alternatives analyses must be conducted. A Candidate Chemical that is the basis for a product being listed as a Priority Product is designated as a Chemical of Concern (COC) for that product. (See Chapter IV.F. for further details.)
- Manufacturers & Other Consumer Product Responsible Entities – The regulations require responsible entities (manufacturers, importers, assemblers, and retailers) to notify DTSC when their product is listed as a Priority Product. DTSC will post this information on its website. Manufacturers (or other responsible entities) of a product listed as a Priority Product must perform an alternatives analysis (AA) for the product and the COCs in the product to determine how best to limit exposures to, or the level of adverse public health and environmental impacts posed by, the COCs in the product. (See Chapter IV.G. for further details.)
- DTSC – The regulations require DTSC to identify and require implementation of regulatory responses designed to protect public health and/or the environment, and maximize the use of acceptable and feasible alternatives of least concern. DTSC may require regulatory responses for a Priority Product (if the manufacturer decides to retain the Priority Product), or for an alternative product selected to replace the Priority Product. (See Chapter IV.H. for further details.)

C. Responsibility for Compliance

- The responsible entity for a consumer product is required to ensure compliance with the requirements pertaining to: (i) notifying DTSC that its product is a Priority Product, (ii) performing an alternatives analysis and submitting Preliminary and Final AA Reports to DTSC for its Priority Product, and (iii) complying with regulatory responses applicable to its product.
- The regulations define “responsible entity” to include: (i) the manufacturer of the product (ii) the U.S. importer of the product, (iii) the assembler of the product, and (iv) retailers who sell the product in California. However, the principal duty to comply with the requirements of the regulations that apply to responsible entities lies with the manufacturer. If the manufacturer does not comply, the importer, if any, then has the duty to comply. A retailer or assembler is required to comply with the regulations only if the manufacturer and importers (if any) fail to comply,

and only after this information is posted on the Failure to Comply List on DTSC's website.

- There will be multiple responsible entities for each consumer product. The requirements will be deemed to be satisfied as long as at least one responsible entity fulfills the requirement for the product. It is anticipated that in many cases the requirements will be fulfilled on behalf of the responsible entity(ies) by the product manufacturer, a trade association or consortium, or a public-private partnership.
- Responsible entities may opt out of complying with the requirement to perform an alternatives analysis by taking certain other actions to reduce or eliminate the potential adverse public health and/or environmental impacts posed by its Priority Product and notifying DTSC of that action.

D. Consequences of Non-Compliance

- When DTSC determines a requirement has not been fulfilled for a product, DTSC will issue a notice of non-compliance to the manufacturer and importers.
- If the non-compliance is not remedied, the product name and information concerning the product and its supply chain will be placed on a Failure to Comply List maintained on DTSC's website.
- DTSC may conduct audits to determine compliance with the requirements of the regulations pertaining to alternatives analyses, regulatory responses, and notification and information submittals.
- DTSC may also initiate enforcement actions, including imposition of fines and penalties, against responsible entities for failure to comply with the regulations.

E. Information on DTSC's Website

The regulations require DTSC to post on its website a comprehensive list of documents and information pertaining to implementation of the regulations. These will be DTSC's main avenue of communication with responsible entities, others in the supply chain, and the public.

F. Chemical and Product Prioritization

This chapter describes in detail the process that DTSC will use to identify and prioritize chemicals and consumer products containing those chemicals. The regulations, as of their effective date, establish an immediate list of ~1,200 Candidate Chemicals (that exhibit one or more hazard traits and/or environmental or toxicological endpoints) using 23 existing authoritative body lists that: (i) list chemicals on the basis of exhibiting at least one of eight hazard traits (carcinogenicity, reproductive toxicity, mutagenicity, developmental toxicity, respiratory sensitivity, endocrine disruption, neurotoxicity, and/or persistent bioaccumulative toxicity); or (ii) list chemicals on exposure indicator lists for water quality, air quality, or biomonitoring. Additionally, the regulations specify the process (including public input) and factors that DTSC may use to identify additional chemicals as Candidate Chemicals. These factors include:

- Chemical adverse public health and environmental impacts
- Adverse impacts of special consideration for: (i) sensitive subpopulations; (ii) environmentally sensitive habitats; (iii) endangered and threatened species; and (iv) environments in California designated as impaired
- Adverse impacts associated with the potential for the chemical to contribute to or cause widespread adverse public health and/or environmental impacts
- Structurally or mechanistically similar chemicals with a known toxicity profile
- Exposures to the chemical

(1) Chemical and Product Information

The prioritization process will be informed by a wealth of information that DTSC will obtain from the public domain. This will include seeking public health and environmental information from other governmental agencies, including: the California Environmental Protection Agency boards, departments and offices; other California State agencies; other states; federal agencies; and other nations. This use of data by DTSC will allow for more prudent and protective decisions throughout implementation of the regulations. The type of data and other information that DTSC will seek, to the extent it determines there is a need for the information, includes, but is not limited to:

- Chemical and product data and information pertinent to the public health, environmental and other factors used to prioritize chemicals and products.
- Information describing the types, categories and classes of products that contain Candidate Chemicals.
- Chemical and product market data.

(2) Applicability

DTSC will *not* include in the product prioritization process a chemical-product pairing for which DTSC makes the following determination: The chemical-product pairing is regulated by one or more federal and/or other California State regulatory program(s) that, in combination, address, for each life cycle segment, the same adverse public health and environmental impacts addressed by these regulations and the authorizing/mandating statute.

(3) Candidate Chemical and Product Prioritization

(a) *KEY PRIORITIZATION FACTORS* – Any product-chemical combination identified and listed as a Priority Product must meet both of the following criteria:

- ✓ There must be potential exposure to the Candidate Chemical(s) in the Product; and
- ✓ There must be the potential for one or more exposures to contribute to or cause significant or widespread adverse public health and/or environmental impacts.

(b) *PRODUCT PRIORITIZATION CRITERIA* – DTSC may list as Priority Products those products that are determined to be of high priority. DTSC's decision to list a Candidate Chemical-product combination as a Priority Product will be based on an evaluation of the potential adverse impacts, exposures, and waste and end-of-life effects associated with the product based on consideration of the factors listed below.

(i) Adverse Impacts and Exposures – DTSC will begin the Candidate Chemical-product evaluation process by evaluating the potential adverse impacts posed by the Candidate Chemical(s) in the product due to potential exposures during the life cycle of the product. The listing of a Candidate Chemical-product combination as a Priority Product shall be based on one or more potential adverse public health and/or environmental impact factors and one or more exposure potential factors in addition to other factors listed below.

- **ADVERSE IMPACTS FROM THE CANDIDATE CHEMICALS** – The potential for the Candidate Chemical(s) in the product to contribute to or cause adverse public health and/or environmental impacts, considering one or more specified factors, including:

- ✓ The Candidate Chemical's hazard traits, environmental and toxicological endpoints, aggregate effects, cumulative effects, physicochemical properties, and environmental fate
 - ✓ The human populations, and/or aquatic, avian, or terrestrial animal or plant organisms for which the Candidate Chemical(s) has the potential to contribute to or cause adverse impacts
 - ✓ The potential for the Candidate Chemical(s) to degrade, form reaction products, or metabolize into another Candidate Chemical or a chemical that exhibits one or more hazard traits and/or environmental or toxicological endpoints
 - ✓ Adverse Impact(s) for sensitive subpopulations; environmentally sensitive habitats; endangered and threatened species; and environments in California designated as impaired
 - ✓ The adverse impacts associated with structurally or mechanistically similar chemicals for which there is a known toxicity profile
- **EXPOSURES** – Potential public health and/or environmental exposures to the Candidate Chemical(s) in the product, considering one or more of the following:
 - ✓ Market presence information for the product
 - ✓ Reliable information demonstrating the occurrence or potential occurrence of exposures to the Candidate Chemical(s) in the product
 - ✓ Information concerning the household and workplace presence of the product, and other products containing the same Candidate Chemical(s)
 - ✓ Potential exposures to the Candidate Chemical(s) in the product during the product's life cycle.
- (ii) Adverse Waste and End-of-Life Effects – DTSC may also consider product uses, or discharges or disposals, that have the potential to contribute to or cause adverse waste and end-of-life effects associated with the Candidate Chemical(s) in the product.
- (iii) Availability of Information – DTSC will consider the extent and quality of information that is available to substantiate the existence or absence of potential adverse public health and environmental impacts, exposures, and adverse waste and end-of-life effects.
- (iv) Other Regulatory Programs – DTSC will consider the scope of other laws under which the product or the Candidate Chemical(s) in the product is/are

regulated and the extent to which these other laws address, and provide adequate protections with respect to the same potential adverse public health and environmental impacts, exposure pathways, and adverse waste and end-of-life effects, that are under consideration as a basis for the product-chemical combination being listed as a Priority Product.

- (v) Safer Alternatives – When deciding whether to list a Candidate Chemical-product combination as a Priority Product, DTSC may also consider whether there is a readily available safer alternative that is functionally acceptable, technically feasible, and economically feasible.

(4) Products Listing Process

- (a) *RULEMAKING PROCESS* – The Priority Products list will be established and updated through the Administrative Procedure Act’s rulemaking process.
- (b) *PRIORITY PRODUCT WORK PLAN* – Within one year after the effective date of these regulations, DTSC will issue a Priority Product Work Plan that identifies the product categories that will be evaluated to identify products to be added to the Priority Products list during the next three years. Subsequent work plans will be issued no later than one year before the three-year expiration date of the current work plan. The regulations specify conditions under which DTSC may revise the work plan subsequent to its issuance.
- (c) *PRIORITY PRODUCT LIST REVISIONS* – DTSC will review, and revise as appropriate, the Priority Products list at least once every 3 years.
- (d) *COMPONENTS* – If the Priority Product is a component of one or more assembled products, the Priority Product listing will include a description of the known assembled product(s) in which the component is used.
- (e) *COMPLEX DURABLE PRODUCTS* – For a complex durable product, DTSC will not list as Priority Products, in a three-year period, more than ten (10) components contained in that product.
- (f) *DUE DATES* – The Priority Products list will include the due dates for the Priority Product Notification (default is 60 days) and the Preliminary AA Report (default is 180 days).
- (g) *PRIORITY PRODUCT NOTIFICATIONS* – Each responsible entity for a product listed on the Priority Products list must provide to DTSC a Priority Product Notification within 60 days after the product is listed as a Priority Product (unless DTSC specifies a later notification date in the Priority Products list).

(5) Initial Priority Products List

- (a) Prior to January 1, 2016, DTSC will list a product as a Priority Product only if the product is being listed on the basis of one or more Candidate Chemicals in the product that have both listed hazard trait and listed exposure concerns.
- (b) The initial final list of Priority Products will include no more than five products.
- (c) The initial proposed list of Priority Products will be made available for public review and comment no later than 180 days after the effective date of the Safer Consumer Products regulations.

(6) Petition Process

Subject to specified limitations, a person may petition DTSC to add to or remove chemicals from the Candidate Chemicals list, or to add to or remove from the Candidate Chemicals list the entirety of an existing chemicals list. A person may also petition DTSC to add to or remove from the Priority Products list a Candidate Chemical-product combination. High priority will be given to petitions by federal and other California State agencies that relate to the petitioning agency's statutory and/or regulatory authorities. After granting a petition, DTSC will evaluate and, if applicable, prioritize the chemical and/or the product in accordance with the prioritization processes described above.

G. Alternatives Analyses

This section details the requirements for the alternatives analyses that must be performed by responsible entities of Priority Products.

(1) Guidance Materials

The regulations require DTSC to prepare, and make available on its website, guidance materials to assist persons in performing AAs, and to post on its website AAs that are available in the public domain at no cost.

(2) Alternatives Analysis --- General Provisions

- (a) A responsible entity for a Priority Product must conduct an AA for the Priority Product and submit a Preliminary AA Report and a Final AA Report to DTSC within specified timeframes.
 - The Preliminary AA Report must be submitted no later than 180 days after the date the product is listed on the final Priority Products listing, unless the Priority Products list specifies a different due date for the product.

- The Final AA Report must be submitted no later than 12 months after the date DTSC issues a notice of compliance for the Preliminary AA Report, unless the responsible entity requests, and DTSC approves, a longer period of time not to exceed 24 months (or up to 36 months if regulatory safety and/or performance testing is required for the alternatives being considered), or if DTSC specifies a longer time frame.
- (b) The regulations allow for a responsible entity to request a one-time extension, not to exceed 90 days, for submitting the Preliminary and/or Final AA Report, if the extension request is based on circumstances that could not reasonably be anticipated or controlled by the responsible entity.
- (c) DTSC will post on its website a notice regarding the availability for public review and comment (for up to 45 days) of each Preliminary AA Report, draft Abridged AA Report, and Alternate Process AA Work Plan. Public comments on these documents will be sent to the person that submitted the document with a copy sent simultaneously to DTSC.
- (3) Chemical/Product Removal/Replacement Notifications
- (a) An AA is not required for a Priority Product if the manufacturer submits one of the following notifications by the due date for the Preliminary AA Report (or by the due date for the Final AA Report if a Preliminary AA Report has already been submitted):
- A Chemical Removal Intent and/or Confirmation Notification, certifying that the COC(s) will be / have been removed from the product without the use of any replacement chemical(s);
 - A Product Removal Intent and/or Confirmation Notification, certifying that the manufacturer will or has ceased fulfilling orders for the product from persons selling or distributing the Priority Product in California.
 - A Product-Chemical Replacement Intent and/or Confirmation Notification, certifying that the COC(s) will be or have been removed from the product and any replacement chemical meets one of the following criteria:
 - ✓ The replacement chemical is not on the list of Candidate Chemicals; or
 - ✓ The replacement chemical is a Candidate Chemical that is already in use, in lieu of the Chemical(s) of Concern, to manufacture the same product by the same or a different manufacturer.

- (b) An Intent Notification must be followed by submission of a Confirmation Notification within 90 days or by the due date for the Preliminary AA Report (or Final AA Report), whichever is later.

(4) Alternatives Analysis Threshold Exemption

- (a) A product that is listed as a Priority Product and that meets the criteria for an alternatives analysis threshold exemption will be exempt from the requirement to perform an alternatives analysis if the manufacturer of the product submits an Alternatives Analysis Threshold Exemption Notification to DTSC.
- (b) An alternatives analysis threshold exemption is only available for a manufacturer's Priority Product if the COC(s) are present in the product solely as contaminants, and the concentration of the COC(s) does not exceed the Practical Quantitation Limit (PQL) for the chemicals. NOTE: If during the product prioritization process DTSC determines that an alternatives analysis threshold is needed for a particular intentionally added chemical in a particular product this can be addressed in the rulemaking for that Priority Product listing. Likewise, the product prioritization process may be used to specify an alternatives analysis threshold greater than the PQL for a particular contaminant COC in a particular product if determined necessary.
- (c) The regulations specify the information that must be included in an Alternatives Analysis Threshold Exemption Notification, including the source of the contaminant COC(s). The notification must identify the PQL(s) for the COC(s) and the methods used to determine the PQL(s). The manufacturer is required to notify DTSC if the information in the Alternatives Analysis Threshold Exemption Notification significantly changes, or the product no longer meets the criteria for an alternatives analysis threshold exemption.

(5) Alternatives Analysis Process and Options

- (a) *TWO-STAGE AA* – The regulations require that each AA be conducted and reported in two stages. The Preliminary AA Report is submitted to DTSC after completion of the first AA stage, and the Final AA Report is submitted after completion of the second AA stage.
- (b) *ABRIDGED AA REPORT* – A responsible entity that determines (after completion of steps 1 through 4 of the first AA stage as described below) that a functionally acceptable and technically feasible alternative is not available may prepare and submit a draft and final Abridged AA Report, in lieu of Preliminary and Final AA Reports, if the responsible entity meets specified requirements.

- (c) *ALTERNATE PROCESS AA* – A responsible entity may use an AA process that differs from the process described in the regulations if certain requirements are met, including:
- The alternate process will provide the information needed to prepare an AA Report that substantially meets the AA Report requirements specified in the regulations.
 - The alternate process will compare the Priority Product and the alternatives using at a minimum the same factors, and associated exposure pathways and life cycle segments, that would be used if the process specified in the regulations was followed.
 - The responsible entity submits an Alternate Process AA Work Plan to DTSC no later than 60 days after the product is included on the Priority Products list.
- (d) *PREVIOUSLY COMPLETED AAs* – The regulations allow a responsible entity to fulfill the AA requirements by submitting a report for a previously completed AA for the Priority Product – if DTSC determines that the report is substantially equivalent to the AA Report requirements specified in the regulations, and that the report contains sufficient information to identify regulatory response(s).
- (e) *REVISED ALTERNATIVE SELECTION DECISION* – After the Final AA Report is submitted, if the alternative selection decision specified in the Final AA Report changes, the responsible entity is required to submit a revised Final AA Report with an explanation of the change. A revised Final AA Report is also required if the original alternative selection decision was to retain the Priority Product, and the responsible entity later decides to replace the Priority Product with an alternative product, or vice versa. This requirement only applies for 3 years after DTSC approves the original Final AA Report.

(6) First Stage of the AA

- (a) STEP 1, IDENTIFICATION OF PRODUCT REQUIREMENTS AND FUNCTION(S) OF COCs
- The function, performance, and legal requirements associated with the Priority Product that must be met by alternatives being considered.
 - The function(s) of the COC(s) in meeting the Priority Product's function, performance, and legal requirements.
 - A determination as to whether the COC(s) or alternative replacement chemical(s) is/are necessary to meet the Priority Product's function, performance, and legal requirements.

- If it is determined that neither the COC(s) or alternative replacement chemical(s) is/are necessary to meet the Priority Product's requirements, the removal of the COC(s) from the Priority Product without the addition of alternative replacement chemical(s) must be evaluated in the AA as one of the alternatives to the Priority Product.
- (b) STEP 2, IDENTIFICATION OF ALTERNATIVES – Identification of alternatives for consideration that meet the requirements for the Priority Product, and eliminate or reduce the concentration of the COC(s) in the Priority Product and/or reduce or restrict public health and/or environmental exposures to the COC(s) in the Priority Product. The responsible entity is required to include in the AA consideration of any identified existing viable alternatives.
- (c) STEP 3, INITIAL EVALUATION AND SCREENING OF ALTERNATIVE REPLACEMENT CHEMICALS
- The responsible entity is required to collect and use available relevant information to identify the adverse public health and environmental impacts associated with each chemical being considered as an alternative to the COC(s) in the Priority Product.
 - Using this information, the responsible entity must compare the identified alternative replacement chemicals with the COC(s) in the Priority Product.
 - The responsible entity must eliminate from further consideration in the AA any alternative replacement chemical that it determines has the potential to pose equal or greater adverse public health and/or environmental impacts as compared to the COC(s).
- (d) STEP 4, CONSIDERATION OF ADDITIONAL INFORMATION – As part of the first stage of the AA, the responsible entity may also consider other relevant information and data not specifically identified above, including the factors and information for the second AA stage (described below). A responsible entity may eliminate an alternative from further consideration based on the additional factors and information as long as the reason for its elimination is explained in the Preliminary AA Report and there are alternatives remaining to be evaluated in the second AA stage.
- (e) STEP 5, PRELIMINARY AA REPORT PREPARATION – The responsible entity is required to prepare, and include in the Preliminary AA Report, a work plan and proposed implementation schedule for completion of the second AA stage and preparation and submittal of the Final AA Report.

(7) Second Stage of the AA

(a) STEP 1, IDENTIFICATION OF FACTORS RELEVANT FOR COMPARISON OF ALTERNATIVES

- A factor, in conjunction with an associated exposure pathway and life cycle segment, is relevant if:
 - (i) It makes a material contribution to the adverse public health impacts, adverse environmental impacts, adverse waste and end-of-life effects, and/or materials and resource consumption impacts associated with the Priority Product and/or one or more alternatives under consideration, and
 - (ii) There is a material difference in the factor's contribution to such impacts between the Priority Product and one or more of the alternatives being considered, and/or between two or more alternatives.
- The responsible entity must use available quantitative information and analytical tools, supplemented by available qualitative information and analytical tools, to identify the factors listed in (i) below, and the associated exposure pathways and life cycle segments, that are relevant for the comparison of the Priority Product and the alternatives under consideration. The factors listed in (ii) and (iii) below are considered relevant for all comparisons.
 - (i) Multimedia life cycle impacts and chemical hazards and adverse impacts for the COC(s) and any alternative replacement chemicals:
 - ✓ Adverse environmental impacts
 - ✓ Adverse public health impacts
 - ✓ Adverse waste and end-of-life impacts
 - ✓ Environmental fate
 - ✓ Materials and resource consumption impacts
 - ✓ Physical chemical hazards
 - ✓ Physicochemical properties
 - (ii) Product function, performance, and legal requirements
 - (iii) Economic impacts
- The identification of relevant exposure pathways must consider:
 - (i) Chemical quantity information
 - (ii) Exposure factors

(b) STEP 2, COMPARISON OF THE PRIORITY PRODUCT AND ALTERNATIVES – The responsible entity must use available quantitative information and analytical tools, supplemented by available qualitative information and analytical tools, to

evaluate and compare the Priority Product and each alternative with respect to each relevant factor and associated exposure pathways and life cycle segments.

- (c) STEP 3, CONSIDERATION OF ADDITIONAL INFORMATION – As part of the second stage of the AA, the responsible entity may also consider other relevant information not specifically identified above, including reconsideration of factors evaluated in the first stage of the AA.
- (d) STEP 4, ALTERNATIVE SELECTION DECISION – The responsible entity selects the alternative(s) that will replace the Priority Product, or decides to retain the Priority Product.
- (e) STEP 5, IDENTIFICATION OF NEXT STEPS – The responsible entity is required to prepare a Final AA Report.

(8) Alternatives Analysis Reports

- (a) The Preliminary and Final AA Reports, and draft and final Abridged AA Reports, must include the information listed below, as applicable. All differences in the information and analyses presented in the Preliminary AA Report (or draft Abridged AA Report) and the Final AA Report (or final Abridged AA Report) must be identified and explained in the final report.
 - An executive summary. The executive summary cannot include any information for which trade secret protection is claimed – this will enable the executive summary to be posted on DTSC’s website in its entirety.
 - Information regarding the preparer of the AA Report
 - Information regarding the responsible entity and the supply chain for the product
 - Information describing the Priority Product and the COCs
 - Identification of comparison factors. The AA Reports must identify which factors, and associated exposure pathways and life cycle segments, were determined to be relevant for evaluation and comparison of the Priority Product and its alternatives. The AA Report must explain the rationales for each factor, exposure pathway, and life cycle segment determined not to be relevant.
 - A description of the alternatives chosen to be evaluated and compared, and an explanation of the rationales for selecting and screening out specific alternatives at each stage of the alternatives comparison process.
 - Detailed information on the evaluation and comparison of the Priority Product and its alternatives for all of the relevant comparison factors, and associated exposure pathways and life cycle segments.

- A description of the methodology used to conduct the AA.
- Identification of all information used as supporting information in performance of the AA and preparation of the AA Reports. This information must be made available to DTSC, upon request. The Final AA Report must also identify any information gaps.
- Final AA Reports and final Abridged AA Reports must include a summary of the public comments received for the Preliminary AA Report or draft Abridged AA Report, and a description as to how the comments are addressed in the report or an explanation as to why the comments are not addressed in the AA Report.
- The Preliminary AA Report must identify and describe the alternatives selected for further evaluation in the second stage of the AA, and explain the rationale for the selection decision. The Final AA Report must include an identification and description of the alternative(s) selected to replace the Priority Product (or a decision to retain the Priority Product); the implementation plan for the selected alternative(s), if any; and any proposed regulatory responses.

(b) The information in the Final AA Report concerning the alternative selection decision must include:

- A description of the alternative(s), if any, selected, and the rationales for the selection decision. This includes an analysis that evaluates and compares the selected alternative(s) against the Priority Product, and an explanation of the reasons for the selection decision, or, alternatively, for the decision not to select and implement an alternative to the Priority Product, whichever is applicable.
- A discussion of the acceptability of the selected alternative, as compared to the Priority Product, with respect to functional, performance, and legal requirements. If no alternative is selected, this information must be provided for each alternative considered.
- The rationales for selecting an alternative that retains one or more COC(s) or uses replacement chemicals, if it is determined during the AA that neither the COC(s) nor replacement chemicals are necessary to satisfy the requirements for the Priority Product (i.e., functional, performance, and legal requirements).
- A list of, and information for, all chemicals known based on available information to be in the selected alternative(s) that are COCs, that differ from the chemicals in the Priority Product, or that are present in the selected

alternative(s) at a higher concentration than in the Priority Product (relative to other chemicals in the Priority Product other than the COC(s)). The required information includes: available environmental fate information for the chemicals; available hazard trait and environmental and toxicological endpoint information for those chemicals; and available chemical identification and description information for those chemicals.

(9) DTSC Review and Determinations for AA Reports

- (a) Within 60 days of receiving an AA Report or Alternate Process AA Work Plan, DTSC will review the AA Report for compliance with the regulations, and issue a notice of compliance, a notice of deficiency, a notice of disapproval, or a notice of ongoing review. Notices of deficiency will give the responsible entity 60 days to remedy the deficiency (or 30 days if it is a second notice of deficiency). If the submitter of the AA Report fails to adequately and timely respond to 2 notices of deficiency for the Final AA Report (or 1 notice of deficiency for the Preliminary AA Report), DTSC will issue a notice of disapproval and the product will be placed on the Failure to Comply List (following notice to the submitter of the report). A notice of disapproval will also be issued if a revised report or work plan is not submitted by the due date.
- (b) Notices of compliance for Preliminary AA Reports and Alternate Process AA Work Plans will specify the due date for submitting the Final AA Report, which will range from 12 to 24 months (or up to 36 months if regulatory safety and/or performance testing is required for alternatives being considered) after DTSC issues the notice of compliance. DTSC may specify an extended due date for submission of the Final AA Report if it determines based on information in the Preliminary AA Report or Alternate Process AA Work Plan that more time is needed.

H. Regulatory Responses

(1) Regulatory Response Selection Principles

- (a) DTSC will require implementation of regulatory responses designed to protect public health and the environment, and maximize the use of alternatives of least concern, when such alternatives are functionally acceptable and technically and economically feasible.
- (b) DTSC will give preference to regulatory responses providing the greatest level of inherent protection. More specifically, preference will be given to alternatives that avoid or reduce adverse public health and/or environmental impacts,

exposures, and/or waste and end-of-life effects through product or process redesign as opposed to alternatives that use administrative or engineering controls to limit exposures to, or releases of, a COC or a replacement Candidate Chemical in a product.

(c) In selecting regulatory responses, DTSC may consider the following factors:

- The degree to which, and speed with which, the regulatory response can address the adverse public health and/or environmental impacts and/or adverse waste and end-of-life effects of the COC(s) or replacement Candidate Chemical(s);
- The ability of end-users to understand and act upon a regulatory response involving provision of information with respect to the Priority Product;
- Any adverse ecological impacts of the regulatory response on sensitive resources, or unique or additional burdens that the regulatory response would impose upon sensitive subpopulations;
- Existing federal and/or California State regulatory requirements applicable to the Chemical(s) of Concern or replacement Candidate Chemical(s);
- The cost to the responsible entity of the regulatory response(s) relative to the cost of other possible responses;
- The practical capacity of responsible entities to comply with the regulatory response(s);
- The management and clean-up costs imposed on public agencies by the ongoing sale of the Priority Product or a selected alternative;
- DTSC's administrative burden in overseeing implementation of the regulatory response(s); and
- The ease of enforcing the regulatory response(s).

(2) Applicability

(a) The regulations specify regulatory responses that will, under specified conditions, apply to:

- Products manufactured as a selected alternative after completion of an AA;
- Priority Products for which an alternative is not selected;
- Priority Products that will remain in commerce pending development and distribution of the selected alternative; and
- Products for which the AA Report is disapproved by DTSC.

(b) A regulatory response is not required for a Priority Product if the manufacturer submits a compliant Removal or Replacement Confirmation Notification (see Section G.(3) above) to DTSC prior to the due date for implementing any regulatory response that would otherwise apply to the product.

(3) Regulatory Response Process

- (a) Within 90 days after issuing a notice of compliance or a notice of disapproval for a Final AA Report or a final Abridged AA Report, DTSC will issue a notice of its proposed determination that one or more of the regulatory responses described below are required, or that no regulatory response is required.
- (b) The proposed regulatory response determination will be sent to all known affected responsible parties and made available for public review and comment for a minimum 45-day period.
- (c) After consideration of public comments, DTSC will send a final regulatory response determination notice to known responsible entity(ies) and post the final notice on its website. The notice will include the due date for implementing the regulatory response(s). In assigning an implementation due date, DTSC will consider the complexity of implementing the regulatory response(s).
- (d) Each proposed and final regulatory response determination notice will include DTSC's determination as to whether or not the regulatory response applies to either or both of the following:
- Priority Products ordered by a retailer prior to the effective date of the Priority Product listing, and still for sale by the retailer as of the date of the final regulatory response determination notice; and/or
 - Priority Products manufactured after the effective date of the Priority Product listing, but before the date of the final regulatory response determination notice.
- (e) Once a final regulatory response determination notice has been issued, DTSC will not augment or revise the regulatory responses for the affected product, except as discussed in (4)(a) below or in the event of a relevant dispute.
- (f) The responsible entity must notify DTSC of the applicability of regulatory responses to the responsible entity's product within 30 days. The responsible entity must send the same notice within 30 days to all persons in California (other than the final purchaser or lessee) to whom the responsible entity directly sells the product, and any other person (other than the final purchaser or lessee) to whom the responsible entity directly sells product if it is reasonably foreseeable that the product will be placed into the California marketplace.
- (g) The responsible entity must notify DTSC upon completion of the implementation of the required regulatory response(s), and (if applicable) upon completion of the implementation of the selected alternative(s). If requested by

DTSC, the responsible entity must provide periodic implementation status reports regarding the selected regulatory response(s) and/or the development and introduction into the California marketplace of the selected alternative(s).

- (h) DTSC will post on its website a Regulatory Response Summary that identifies the regulatory response(s) for each selected alternative for a Priority Product (and each Priority Product, as applicable), and the implementation dates for the alternative product(s), if any, and the regulatory response(s).

(4) Regulatory Responses

(a) *SUPPLEMENTAL AA REPORT INFORMATION AND REGULATORY RESPONSE REVISIONS*

- Prior to imposing any regulatory response for a product, DTSC may require the responsible entity to provide to DTSC any information supplementary to the AA Report that DTSC determines is necessary to select and ensure implementation of one or more regulatory responses.
- When imposing one or more regulatory responses for a product, DTSC may include a requirement that the responsible entity provide information to DTSC to fill one or more information gaps identified in the AA Report, if DTSC determines this information is necessary to re-evaluate the initial regulatory responses. Following receipt of the requested information DTSC may, based on this new information, revise the initial regulatory response(s) imposed for the product. Any revisions to the initial regulatory responses will be noticed for public review and comment no later than 90 days after receiving the requested information.
- In addition to the circumstances described above, DTSC may revise the initial regulatory response(s) imposed for a product in response to a revised AA Report submitted by a responsible entity when there is a revision to the alternative selection decision.

- (b) *PRODUCT INFORMATION FOR CONSUMERS* – Product information must be provided to consumers if the alternative product contains a COC or any replacement Candidate Chemicals, or if the manufacturer chooses to retain the Priority Product (indefinitely or for more than 12 months pending development and distribution of the alternative product). The regulations specify the types of information that must be provided to consumers, and the mechanisms that must be used to provide the information.

- (c) *USE RESTRICTIONS* – DTSC may impose restrictions on the use of COCs or replacement Candidate Chemicals in a product, or specified restrictions on the

product, to reduce the amount of a COC or replacement Candidate Chemical in the product, or reduce the potential for the product to contribute to or cause an exposure to the COC or replacement Candidate Chemicals in the product.

(d) *PRODUCT SALES PROHIBITION* – If the selected alternative contains a COC or replacement Candidate Chemical (or if an alternative is not selected), and DTSC determines there is a safer alternative that does not contain a COC or replacement Candidate Chemical and that is functionally acceptable and technologically and economically feasible, the responsible entity must do one of the following:

- Cease placing the product into the California marketplace, directly or indirectly; or
- Submit to DTSC an AA Report that selects an alternative that does not contain a COC or replacement Candidate Chemical.

DTSC may also impose a product sales prohibition in the absence of a determination that there is a safer, functionally acceptable, and technologically and economically feasible alternative, unless the responsible entity demonstrates to DTSC's satisfaction that: (i) the overall beneficial public health and/or environmental impacts and/or social utility of the product significantly outweigh the overall adverse public health and environmental impacts of the product; and (ii) administrative and/or engineering restrictions on the nature and/or use of the product will adequately protect public health and the environment.

(e) *ENGINEERING OR ADMINISTRATIVE CONTROLS* – Under specified conditions, DTSC may require a manufacturer to engineer safety measures that integrally contain or control access to, and/or implement administrative controls that limit exposure to, the COC(s) or replacement Candidate Chemical(s) in a selected alternative, or the COC(s) in a Priority Product for which an alternative is not selected, to reduce the potential for adverse public health and/or environmental impacts.

(f) *END-OF-LIFE PRODUCT MANAGEMENT PROGRAM*

- A manufacturer must establish, maintain, and fund an end-of-life product stewardship program, and provide product information to consumers, if the alternative product (or the Priority Product, if the manufacturer chooses to retain the Priority Product) is required to be managed as a hazardous waste in California at end-of-life. The requirements for the product stewardship plan and program are specified in the regulations.

- A manufacturer may individually fulfill these requirements, or may join with other manufacturers to form a non-profit third-party product stewardship organization, funded by participating manufacturers, to fulfill the requirements.
 - A manufacturer may request DTSC's approval to substitute an alternative end-of-life management program that achieves, to the maximum extent feasible, the same results as the program specified in the regulations.
 - A manufacturer may request an exemption from the requirement to provide an end-of-life management program by demonstrating to DTSC's satisfaction that an end-of-life management program cannot feasibly be implemented for the product.
- (g) *ADVANCEMENT OF GREEN CHEMISTRY AND GREEN ENGINEERING* – When a manufacturer concludes that no safer alternative to its Priority Product is functionally acceptable and technically and economically feasible, or a manufacturer selects an alternative that reduces but does not eliminate the use of Candidate Chemicals in the product, DTSC may require the manufacturer to initiate a research and development project or fund a challenge grant pertinent to the Priority Product that uses green chemistry and/or green engineering principles to: (i) design a safer alternative; (ii) improve the performance of a safer alternative; (iii) decrease the cost of a safer alternative; and/or (iv) increase the market penetration of a safer alternative.

(5) Regulatory Response Exemptions

The regulations provide a process for a responsible entity to request an exemption from an otherwise applicable regulatory response based on either or both of the following:

- (a) The required regulatory response would conflict with a requirement of another California State or federal regulatory program, or a treaty or international trade agreement, in such a way that the responsible entity could not reasonably be expected to comply with both requirements. In this situation, DTSC may require implementation of a modified regulatory response that resolves the conflict.
- (b) The required regulatory response substantially duplicates a requirement of another California State or federal regulatory program, or a treaty or international trade agreement, without conferring additional public health or environmental protection benefits.

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APPENDIX A

Health and Safety Code, Division 20, Chapter 6.5, Article 14. Green Chemistry

Article 14. Green Chemistry
Chapter 6.5, Division 20, Health and Safety Code

25251. For purposes of this article, the following definitions shall apply:

- (a) "Clearinghouse" means the Toxics Information Clearinghouse established pursuant to Section 25256.
- (b) "Council" means the California Environmental Policy Council established pursuant to subdivision (b) of Section 71017 of the Public Resources Code.
- (c) "Office" means Office of Environmental Health Hazard Assessment.
- (d) "Panel" means the Green Ribbon Science Panel established pursuant to Section 25254.
- (e) "Consumer product" means a product or part of the product that is used, brought, or leased for use by a person for any purposes. "Consumer product" does not include any of the following:
 - (1) A dangerous drug or dangerous device as defined in Section 4022 of the Business of Professions Code.
 - (2) Dental restorative materials as defined in subdivision (b) of Section 1648.20 of the Business and Professions Code.
 - (3) A device as defined in Section 4023 of the Business of Professions Code.
 - (4) A food as defined in subdivision (a) of Section 109935.
 - (5) The packaging associated with any of the items specified in paragraph (1), (2), or (3).
 - (6) A pesticide as defined in Section 12753 of the Food and Agricultural Code or the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. Sec. 136 and following).
 - (7) Mercury-containing lights defined as mercury-containing lamps, bulbs, tubes, or other electric devices that provide functional illumination.
- (f) This section shall remain in effect only until December 31, 2011, and as of that date is repealed, unless a later enacted statute, that is enacted before December 31, 2011, deletes or extends that date.

25251. For purposes of this article, the following definitions shall apply:

- (a) "Clearinghouse" means the Toxics Information Clearinghouse established pursuant to Section 25256.
- (b) "Council" means the California Environmental Policy Council established pursuant to subdivision (b) of Section 71017 of the Public Resources Code.
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- (e) "Consumer product" means a product or part of the product that is used, brought, or leased for use by a person for any purposes. "Consumer product" does not include any of the following:
 - (1) A dangerous drug or dangerous device as defined in Section 4022 of the Business of Professions Code.
 - (2) Dental restorative materials as defined in subdivision (b) of Section 1648.20 of the Business and Professions Code.
 - (3) A device as defined in Section 4023 of the Business of Professions Code.

- (4) A food as defined in subdivision (a) of Section 109935.
- (5) The packaging associated with any of the items specified in paragraph (1), (2), or (3).
- (6) A pesticide as defined in Section 12753 of the Food and Agricultural Code or the Federal Insecticide, Fungicide and Rodenticide (7 United States Code Sections 136 and following).
- (f) This section shall become effective on January 1, 2012.

25252. (a) On or before January 1, 2011, the department shall adopt regulations to establish a process to identify and prioritize those chemicals or chemical ingredients in consumer products that may be considered as being a chemical of concern, in accordance with the review process specified in Section 25252.5. The department shall adopt these regulations in consultation with the office and all appropriate state agencies and after conducting one or more public workshops for which the department provides public notice and provides an opportunity for all interested parties to comment. The regulations adopted pursuant to this section shall establish an identification and prioritization process that includes, but is not limited to, all of the following considerations:

- (1) The volume of the chemical in commerce in this state.
 - (2) The potential for exposure to the chemical in a consumer product.
 - (3) Potential effects on sensitive subpopulations, including infants and children.
- (b) (1) In adopting regulations pursuant to this section, the department shall develop criteria by which chemicals and their alternatives may be evaluated. These criteria shall include, but not be limited to, the traits, characteristics, and endpoints that are included in the clearinghouse data pursuant to Section 25256.1.
- (2) In adopting regulations pursuant to this section, the department shall reference and use, to the maximum extent feasible, available information from other nations, governments, and authoritative bodies that have undertaken similar chemical prioritization processes, so as to leverage the work and costs already incurred by those entities and to minimize costs and maximize benefits for the state's economy.
- (3) Paragraph (2) does not require the department, when adopting regulations pursuant to this section, to reference and use only the available information specified in paragraph (2).

25252.5. (a) Except as provided in subdivision (f), the department, in adopting the regulations pursuant to Sections 25252 and 25253, shall prepare a multimedia life cycle evaluation conducted by affected agencies and coordinated by the department, and shall submit the regulations and the multimedia life cycle evaluation to the council for review.

- (b) The multimedia evaluation shall be based on the best available scientific data, written comments submitted by interested persons, and information collected by the department in preparation for adopting the regulations, and shall address, but is not limited to, the impacts associated with all the following:
- (1) Emissions of air pollutants, including ozone forming compounds, particulate matter, toxic air contaminants, and greenhouse gases.
 - (2) Contamination of surface water, groundwater, and soil.

- (3) Disposal or use of the byproducts and waste materials.
- (4) Worker safety and impacts to public health.
- (5) Other anticipated impacts to the environment.

(c) The council shall complete its review of the multimedia evaluation within 90 calendar days following notice from the department that it intends to adopt regulations. If the council determines that the proposed regulations will cause a significant adverse impact on the public health or the environment, or that alternatives exist that would be less adverse, the council shall recommend alternative measures that the department or other state agencies may take to reduce the adverse impact on public health or the environment. The council shall make all information relating to its review available to the public.

(d) Within 60 days of receiving notification from the council of a determination of significant adverse impact, the department shall adopt revisions to the proposed regulation to avoid or reduce the adverse impact, or the affected agencies shall take appropriate action that will, to the extent feasible, mitigate the adverse impact so that, on balance, there is no significant adverse impact on public health or the environment.

(e) In coordinating a multimedia evaluation pursuant to subdivision (a), the department shall consult with other boards and departments within the California Environmental Protection Agency, the State Department of Public Health, the State and Consumer Services Agency, the Department of Homeland Security, the Department of Industrial Relations, and other state agencies with responsibility for, or expertise regarding, impacts that could result from the production, use, or disposal of consumer products and the ingredients they may contain.

(f) Notwithstanding subdivision (a), the department may adopt regulations pursuant to Sections 25252 and 25253 without subjecting the proposed regulation to a multimedia evaluation if the council, following an initial evaluation of the proposed regulation, conclusively determines that the regulation will not have any significant adverse impact on public health or the environment.

(g) For the purposes of this section, "multimedia life cycle evaluation" means the identification and evaluation of a significant adverse impact on public health or the environment, including air, water, or soil, that may result from the production, use, or disposal of a consumer product or consumer product ingredient.

25253. (a) (1) On or before January 1, 2011, the department shall adopt regulations pursuant to this section that establish a process for evaluating chemicals of concern in consumer products, and their potential alternatives, to determine how best to limit exposure or to reduce the level of hazard posed by a chemical of concern, in accordance with the review process specified in Section 25252.5. The department shall adopt these regulations in consultation with all appropriate state agencies and after conducting one or more public workshops for which the department provides public notice and provides an opportunity for all interested parties to comment.

(2) The regulations adopted pursuant to this section shall establish a process that includes an evaluation of the availability of potential alternatives and potential hazards posed by those alternatives, as well as an evaluation of critical exposure pathways. This process shall include life cycle assessment tools that take into consideration, but shall not be limited to, all of the following:

- (A) Product function or performance.
- (B) Useful life.
- (C) Materials and resource consumption.
- (D) Water conservation.
- (E) Water quality impacts.
- (F) Air emissions.
- (G) Production, in-use, and transportation energy inputs.
- (H) Energy efficiency.
- (I) Greenhouse gas emissions.
- (J) Waste and end-of-life disposal.
- (K) Public health impacts, including potential impacts to sensitive subpopulations, including infants and children.
- (L) Environmental impacts.
- (M) Economic impacts.

(b) The regulations adopted pursuant to this section shall specify the range of regulatory responses that the department may take following the completion of the alternatives analysis, including, but not limited to, any of the following actions:

- (1) Not requiring any action.
- (2) Imposing requirements to provide additional information needed to assess a chemical of concern and its potential alternatives.
- (3) Imposing requirements on the labeling or other type of consumer product information.
- (4) Imposing a restriction on the use of the chemical of concern in the consumer product.
- (5) Prohibiting the use of the chemical of concern in the consumer product.
- (6) Imposing requirements that control access to or limit exposure to the chemical of concern in the consumer product.
- (7) Imposing requirements for the manufacturer to manage the product at the end of its useful life, including recycling or responsible disposal of the consumer product.
- (8) Imposing a requirement to fund green chemistry challenge grants where no feasible safer alternative exists.
- (9) Any other outcome the department determines accomplishes the requirements of this article.

(c) The department, in developing the processes and regulations pursuant to this section, shall ensure that the tools available are in a form that allows for ease of use and transparency of application. The department shall also make every feasible effort to devise simplified and accessible tools that consumer product manufacturers, consumer product distributors, product retailers, and consumers can use to make consumer product manufacturing, sales, and purchase decisions.

25254. (a) In implementing this article, the department shall establish a Green Ribbon Science Panel. The panel shall be composed of members whose expertise shall encompass all of the following disciplines:

- (1) Chemistry.
- (2) Chemical engineering.
- (3) Environmental law.

- (4) Toxicology.
- (5) Public policy.
- (6) Pollution prevention.
- (7) Cleaner production methods.
- (8) Environmental health.
- (9) Public health.
- (10) Risk analysis.
- (11) Materials science.
- (12) Nanotechnology.
- (13) Chemical synthesis.
- (14) Research.
- (15) Maternal and child health.

(b) The department shall appoint all members to the panel on or before July 1, 2009. The department shall appoint the members for staggered three-year terms, and may reappoint a member for additional terms, without limitation.

(c) The panel shall meet as often as the department deems necessary, with consideration of available resources, but not less than twice each year. The department shall provide for staff and administrative support to the panel.

(d) The panel meetings shall be open to the public and are subject to the Bagley-Keene Open Meeting Act (Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code).

25255. The panel may take any of the following actions:

(a) Advise the department and the council on scientific and technical matters in support of the goals of this article of significantly reducing adverse health and environmental impacts of chemicals used in commerce, as well as the overall costs of those impacts to the state's society, by encouraging the redesign of consumer products, manufacturing processes, and approaches.

(b) Assist the department in developing green chemistry and chemicals policy recommendations and implementation strategies and details, and ensure these recommendations are based on a strong scientific foundation.

(c) Advise the department and make recommendations for chemicals the panel views as priorities for which hazard traits and toxicological end-point data should be collected.

(d) Advise the department in the adoption of regulations required by this article.

(e) Advise the department on any other pertinent matter in implementing this article, as determined by the department.

25256. The department shall establish the Toxics Information Clearinghouse, which shall provide a decentralized, Web-based system for the collection, maintenance, and distribution of specific chemical hazard trait and environmental and toxicological end-point data. The department shall make the clearinghouse accessible to the public through a single Internet Web portal, and, shall, to the maximum extent possible, operate the clearinghouse at the least possible cost to the state.

25256.1. On or before January 1, 2011, the office shall evaluate and specify the hazard traits and environmental and toxicological end-points and any other relevant

data that are to be included in the clearinghouse. The office shall conduct this evaluation in consultation with the department and all appropriate state agencies, after one or more public workshops, and an opportunity for all interested parties to comment. The office may seek information from other states, the federal government, and other nations in implementing this section.

25256.2. (a) The department shall develop requirements and standards related to the design of the clearinghouse and data quality and test methods that govern the data that is eligible to be available through the clearinghouse.

(b) The department may phase in the access to eligible information and data in the clearinghouse as that information and data become available.

(c) The department shall ensure the clearinghouse is capable of displaying updated information as new data becomes available.

25256.3. The department shall consult with other states, the federal government, and other nations to identify available data related to hazard traits and environmental and toxicological end-points, and to facilitate the development of regional, national, and international data sharing arrangements to be included in the clearinghouse.

25257. (a) A person providing information pursuant to this article may, at the time of submission, identify a portion of the information submitted to the department as a trade secret and, upon the written request of the department, shall provide support for the claim that the information is a trade secret. Except as provided in subdivision (d), a state agency shall not release to the public, subject information supplied pursuant to this article that is a trade secret, and that is so identified at the time of submission, in accordance with Section 6254.7 of the Government Code and Section 1060 of the Evidence Code.

(b) This section does not prohibit the exchange of a properly designated trade secret between public agencies, if the trade secret is relevant and necessary to the exercise of the agency's jurisdiction and the public agency exchanging the trade secrets complies with this section. An employee of the department that has access to a properly designated trade secret shall maintain the confidentiality of that trade secret by complying with this section.

(c) Information not identified as a trade secret pursuant to subdivision (a) shall be available to the public unless exempted from disclosure by other provisions of law. The fact that information is claimed to be a trade secret is public information.

(d) (1) Upon receipt of a request for the release of information that has been claimed to be a trade secret, the department shall immediately notify the person who submitted the information. Based on the request, the department shall determine whether or not the information claimed to be a trade secret is to be released to the public.

(2) The department shall make the determination specified in paragraph (1), no later than 60 days after the date the department receives the request for disclosure, but not before 30 days following the notification of the person who submitted the information.

(3) If the department decides that the information requested pursuant to this subdivision should be made public, the department shall provide the person who submitted the information 30 days' notice prior to public disclosure of the information,

unless, prior to the expiration of the 30-day period, the person who submitted the information obtains an action in an appropriate court for a declaratory judgment that the information is subject to protection under this section or for a preliminary injunction prohibiting disclosure of the information to the public and promptly notifies the department of that action.

(e) This section does not authorize a person to refuse to disclose to the department information required to be submitted to the department pursuant to this article.

(f) This section does not apply to hazardous trait submissions for chemicals and chemical ingredients pursuant to this article.

25257.1. (a) This article does not limit and shall not be construed to limit the department's or any other department's or agency's existing authority over hazardous materials.

(b) This article does not authorize the department to supersede the regulatory authority of any other department or agency.

(c) The department shall not duplicate or adopt conflicting regulations for product categories already regulated or subject to pending regulation consistent with the purposes of this article.

APPENDIX B

California Environmental Protection Agency, Department of Toxic Substances Control.
Safer Consumer Products Revised Proposed Regulations. January 2013

APPENDIX C

California Environmental Protection Agency, Department of Toxic Substances Control.
Revised Initial Statement of Reasons for the Safer Consumer Products Proposed
Regulations. December 2012

These appendices are available as separate documents.

Copies may be obtained in electronic form from DTSC's Internet site at:

<http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/index.cfm> and

<http://www.dtsc.ca.gov/SCPRegulations.cfm>, or printed copies may be obtained from

Krycia Von Burg of DTSC's Regulations Section at (916) 324-2810 by email at

gcregs@dtsc.ca.gov.