

Joshua Grice

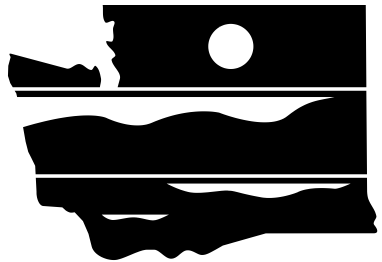
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DEPARTMENT OF
ECOLOGY
State of Washington

FLAME RETARDANTS

A REPORT TO THE LEGISLATURE

October 2015

Legislative Proviso Language

26 (a) Review tetrabromobisphenol A, chemical abstracts service number
27 79-94-7 and antimony, chemical abstracts service number 7440-36-0 and
28 their use in children's products and furniture as flame retardants.
29 The department must consider available information on the hazards,
30 uses, exposures, potential health and environmental concerns, safer
31 alternatives, existing regulatory programs, and information from other
32 governments or authoritative bodies. By December 31, 2014, the
33 department must provide to the appropriate committees of the
34 legislature a summary of the data reviewed and recommendations on
35 whether to ban or restrict antimony and tetrabromobisphenol A flame
36 retardants in children's products and furniture; and
37 (b) Test for the presence of flame retardants in children's
38 products and furniture. By December 31, 2014, the department must

1 report to the appropriate legislative committees on test results,
2 available information on hazards, uses, exposures, safer alternatives,
3 existing regulatory programs, potential health and environmental
4 concerns, information from other governmental or authoritative bodies,
5 and recommendations on whether to restrict or ban the flame retardants
6 in children's products and furniture.

TDCPP: Tris(1,3-dichloro-2-propyl) phosphate

TCPP: Tris(1-chloro-2-propyl) phosphate

TBPH: Bis(2-ethylhexyl)-2,3,4,5-tetrabromophthalate

TPP: Triphenyl phosphate

V6: Antiblaze® V6 or 2,2-bis(chloromethyl)propane-1,3-diyltetrakis(2-chloroethyl) bisphosphate

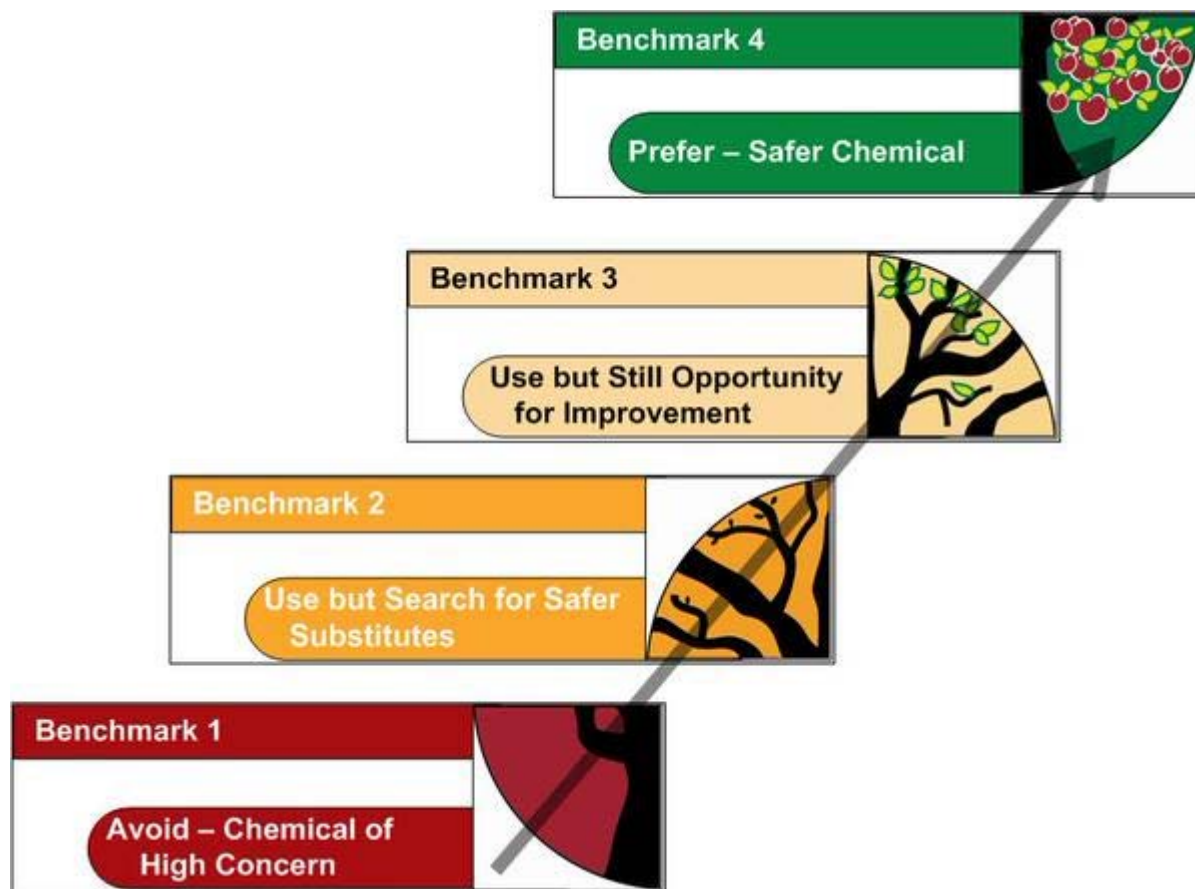
IPTPP: Isopropylphenyl phosphate

TCEP: Tris(2-chloroethyl) phosphate

TBB: (2-ethylhexyl)-2,3,4,5-tetrabromobenzoate

HBCD: Hexabromocyclododecane

Green Screen for Safer Chemicals



Recommendations – Children's Products & Furniture

- Establish 1 000 ppm limit for TDCPP, TCPP, TBPH, V6, IPTPP, TCEP, TBB
- Establish 1 000 ppm limit for HBCD, TBBPA in additive form

Recommendations –TBBPA

- Insufficient evidence for restrictions
- Require reporting on additive TBBPA
- Encourage safer alternatives
- Gather more information on use


Recommendations – Antimony & Antimony Trioxide (ATO)

- Insufficient evidence for restrictions
- Require reporting on use of ATO in consumer products

Other Recommendations

- Comprehensive Chemical Action Plan on FRs
- Require reporting on use of FRs in consumer products
- Encourage alternative assessments / safer alternatives
- Address gaps in data on human exposure
- Environmentally preferred purchasing

Product Testing Database



Product Testing Data

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Search product data by: **Product Description** [< back to main search](#)

Please click the View Report button to the right to search the data.

Product Description

View Report

1 of 2 ?

100%

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134 Lab Results filtered by body wash.

Date Searched: 10/21/2014

Qualifier	Definition
E	Reported result is an estimate because it exceeded the calibration range.
J	Analyte was positively identified. The reported result is an estimate.
N	The analyte was tentatively identified in the sample, at the result value reported.
NJ	The analyte was tentatively identified in the sample but the result value reported is an estimate.
REJ	The sample result was rejected due to serious deficiencies in the ability to analyze the sample, meet quality control criteria or other technical reason. The presence or absence of the analyte cannot be verified.
U	Analyte was not detected above the method reporting limit.
UJ	Analyte was not detected above the reporting limit. However, the reporting limit is an estimated value.

Detail	Chemical	Product Description	Component Description	Component Material	Brand	Store	Analysis Value	Qualifier	Analysis Method	Extraction Method
View	Dibutyl phthalate 84-74-2	Old ID: TG061-a00, 3 in 1 shampoo conditioner body	Old ID: TG061-c01, 3 in 1 shampoo conditioner	Historical Record - material was not recorded	Suave Kids	Target	9.37 ppm	U	CPSC-CH-C1001-09.3	

Blog Series



ECOconnect

Proud to help you protect Washington's quality of life

About Us

The Mission of the Department of Ecology is to protect, preserve and enhance Washington's environment, and promote the wise management of our air, land and water for the benefit of current and future generations.

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Ecology's Priorities

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- [Managing our Water](#)
- [Protecting Puget Sound](#)
- [Facing Climate Change](#)
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Blog Archive

- ▼ 2014 (98)
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 - ▶ May (16)
 - ▼ April (21)

Monday, April 14, 2014

Earth ... pass it on: Tackling Toxics Children First

By [Erika Holmes](#), communications manager, [Reducing Toxic Threats](#)

Toxic chemicals, especially long-lasting ones that build up over time, can be found everywhere - our air, land, water ... and our bodies. Some pose an immediate health threat, especially to children exposed during critical periods in their development. Others, called [persistent, bioaccumulative toxics](#), gradually increase in the environment and in our bodies, causing disease long after we are first exposed.

Preventing exposures to toxics is the smartest, cheapest and healthiest way to protect people and the environment, which guides the Department of Ecology's approach to [reducing toxic threats](#) in Washington.



Children are more sensitive to toxic chemicals than the general population. The presence of a chemical in a product does not necessarily mean it's unsafe. However, knowing which [chemicals of high concern to children](#) manufacturers use in products provides essential clues to understand when safer alternatives are needed.

Groundbreaking laws help move toward safer products for children and general consumers

Many laws aimed at reducing the impacts of toxic chemicals ban or limit one chemical or product at a time. Washington is taking a broader approach by creating laws addressing one of the biggest challenges in developing more effective toxic chemical policies - the lack of data.

In 1991, Washington was one of the first states to pass legislation limiting four toxic metals (mercury, lead, cadmium, and hexavalent chromium) in all packaging. The [toxics in packaging law](#) takes a broad view of packaging by including its components and covering a wide range of materials used as packaging.

In 2008, Washington passed the [Children's Safe Product Act](#) (CSPA). The law has two parts. The first part limited the amounts of lead, cadmium and six phthalates allowed in children's products sold in Washington after July 1, 2009. Ecology and the Department of Health enacted the second part of the law by developing a list of [chemicals of high concern to children](#) and rules requiring [manufacturers to report their use of these chemicals](#) in children's products.

Taking action: Moving from the law books to the laboratory

During 2012 and 2013, Ecology tested children's and consumer products to verify that manufacturers are complying with CSPA and toxics in packaging requirements.

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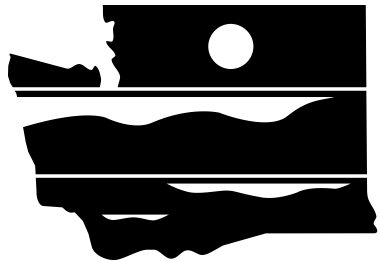
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RESOURCES

Flame retardant report:

<https://fortress.wa.gov/ecy/publications/SummaryPages/1404047.html>

Summary:

<https://fortress.wa.gov/ecy/publications/SummaryPages/1504008.html>

Search reported data on children's products:

<http://www.ecy.wa.gov/programs/swfa/cspa/search.html>

Search product testing data:

<https://fortress.wa.gov/ecy/ptdbpublicreporting/Default.aspx>

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