



DEPARTMENT OF
ECOLOGY
State of Washington

Concise Explanatory Statement
Chapter 173-334 WAC
Children's Safe Products – Reporting Rule

Summary of rule making and response to comments

October 2013
Publication no. 13-07-064

Publication and Contact Information

This publication is available on the Department of Ecology's website at <https://fortress.wa.gov/ecy/publications/SummaryPages/1307064.html>

For more information contact:

Waste 2 Resources Program

P.O. Box 47600

Olympia, WA 98504-7600

Phone: 360-407-6900

Washington State Department of Ecology - www.ecy.wa.gov

- Headquarters, Olympia 360-407-6000
- Northwest Regional Office, Bellevue 425-649-7000
- Southwest Regional Office, Olympia 360-407-6300
- Central Regional Office, Yakima 509-575-2490
- Eastern Regional Office, Spokane 509-329-3400

Ecology publishes this document to meet the requirements of the Washington State Administrative Procedure Act (RCW 34.05.325)

To ask about the availability of this document in a format for the visually impaired, call the Waste 2 Resources Program at 360-407-6900.

Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

Concise Explanatory Statement

Chapter 173-334 WAC Children's Safe Products – Reporting Rule

Waste 2 Resources Program
Washington State Department of Ecology
Olympia, Washington 98504-7600

This page is purposely left blank.

Table of Contents

Introduction.....	1
Reasons for Adopting the Rule.....	1
Differences between the Proposed Rule and Adopted Rule.....	2
Response to Comments.....	2
Commenter Index.....	4
Appendix A: Copies of all written comments.....	A-1
Appendix B: Transcripts from public hearings.....	B-1

Introduction

The purpose of a Concise Explanatory Statement is to:

- Meet the Administrative Procedure Act (APA) requirements for agencies to prepare a Concise Explanatory Statement (RCW 34.05.325).
- Provide reasons for adopting the rule.
- Describe any differences between the proposed rule and the adopted rule.
- Provide Ecology's response to public comments.

This Concise Explanatory Statement provides information on The Washington State Department of Ecology's (Ecology) rule adoption for:

Title: Children's Safe Products – Reporting Rule

WAC Chapter(s): 173-334

Adopted date: October 22nd, 2013

Effective date: November 22nd, 2013

To see more information related to this rule making or other Ecology rule makings please visit our web site: <http://www.ecy.wa.gov/laws-rules/index.html>

Reasons for Adopting the Rule

This rulemaking amends Chapter 173-334 WAC, Children's Safe Products - Reporting Rule to add tris (1,3-dichloro-2-propyl)phosphate (TDCPP) (CAS # 13674-87-8) to the reporting list of chemicals, and to remove n-butanol (CAS # 71-36-3) from the reporting list of chemicals. This rule making is in response to new information associated with petitions to the agency. The Washington Department of Health has also confirmed that TDCPP meets the toxicity and exposure criteria to be included on the CHCC list.

This rule making is in response to new information associated with petitions Ecology received from the Washington Toxics Coalition (WTC) and the American Chemistry Council (ACC). The WTC petition demonstrated that TDCPP met the criteria that are required to add a chemical to the reporting list of chemicals. Additional information has also indicated that there is a need to better understand the use of flame retardants in children's products. The ACC information demonstrated that n-butanol no longer meets the criteria used to put a chemical on the reporting list of chemicals.

Differences Between the Proposed Rule and Adopted Rule

RCW 34.05.325(6)(a)(ii) requires Ecology to describe the differences between the text of the proposed rule as published in the *Washington State Register* and the text of the rule as adopted, other than editing changes, stating the reasons for the differences.

There are no differences between the proposed rule filed on July 22nd, 2013 and the adopted rule filed on October 22nd, 2013.

Response to Comments

The following comments have been summarized or paraphrased from the comment letters.

Ecology accepted comments between July 22nd, 2013 until September 6th, 2013. This section provides summarized comments that we received during the public comment period and our responses. (RCW 34.05.325(6)(a)(iii))

We support the addition of TDCPP to the Reporting List of Chemicals of High Concern to Children. (Washington State Nurses Association, Washington Toxics Coalition, Evan Hirsch)

Ecology agrees that TDCPP (CAS# 13674-87-8) meets the criteria for inclusion on the Reporting List of Chemicals of High Concern to Children, and also meets the current criteria for prioritization.

Additional chemicals that meet the legal criteria to be on the Reporting List of Chemicals of High Concern to children should be added. (Washington Toxics Coalition)

Thank you for your thorough and well-researched comment. Additional modifications to the Reporting List of Chemicals of High Concern to Children are outside the scope of this rulemaking. Adding additional chemicals would require proposing new rule language and additional public comment. Ecology has elected to complete the current rule proposal, and plans to propose a more thorough update to the reporting rule in 2016, subject to the availability of resources at that time. We will consider the information contained in your comment at that time.

Why is styrene on the list of chemicals of high concern to children? Doesn't the addition of styrene on the CHCC list result in all polystyrene products being subject to reporting? (Steven Schaeffer)

Styrene (CAS# 100-42-5) was adopted in rule as part of the original Reporting List of Chemicals of High Concern to Children. It was not added in this rulemaking. Manufacturers must report the presence of styrene in children's products as required in WAC 173-334.

A manufacturer of a polystyrene product would only be required to report if the product contained styrene. If the styrene is intentionally added, it must be reported at any amount above the practical quantitation limit. If the styrene is present as a contaminant, it must be reported if it is present above 100 parts per million.

Why can't we list companies who send us cadmium and lead laden toys as terrorists, and make it illegal to do business with them? (Thom Laz)

This issue is outside the scope of this rulemaking.

Commenter Index

The table below lists the names of organizations or individuals who submitted a comment on the rule proposal. Ecology summarized or paraphrased the comments submitted and they can be found in the Response to Comments Section on Page 2.

Commenter	Affiliation	Comment Page #
Dr. Evan Hirsch, MD	Hirsch Holistic Family Medicine	A - 1
Thom Laz		A - 2
Steven Schaeffer Director of Compliance I	PTI Group Inc.	A - 3
Karen R. Bowman, MN, RN, COHN-S Environmental Health Specialist	Washington State Nurses Association	A - 4
Laurie Valeriano Executive Director	Washington Toxics Coalition	A - 6

Appendix A: Copies of all written comments

Hirsch Holistic Family Medicine
Whole health. Whole body. Whole family.

3525 Ensign Rd NE, Ste N | Olympia, WA 98506 | Office 360-464-9965 | Fax 888-897-8320
www.doctorevan.com | admin@doctorevan.com

To whom it may concern:

My name is Dr. Evan Hirsch, MD, and I am here representing myself, speaking in support of adding TRIS to the Reporting List of Chemicals of High Concern to Children.

I am a family physician here in Olympia at Hirsch Holistic Family Medicine. I am Board Certified in Family Medicine and Holistic Medicine and have specific trainings in Environmental Medicine. I am also the father of a 5 year old and a business man.

In a review of the research, there are multiple studies (37 per Pubmed) indicating that TRIS causes development toxicity, DNA mutations and disrupts hormones. Since DNA is the building block for all of our biochemical pathways, effects can be significant and especially for children.

Young children are more at risk because their bodies are still developing. They are more likely to ingest household dust that contains flame retardants and other chemicals, like chlorinated TRIS, because they play on the floor and put their hands and toys in their mouths frequently.

TRIS (TDCPP) was designated as a probable carcinogen by the Consumer Product Safety Commission in 2006, and in late 2011 the State of California listed the chemical as a carcinogen under Prop 65.

As a physician, I took an oath of non-maleficence, “First, do no harm.” I believe this should be an important tenant for business practices as well.

Given the research, I highly recommend that you add TRIS and similar chemicals to the Reporting List of Chemicals of High Concern to Children. When it comes to doing no harm, removing toxins from our environment should be an easy choice.

Thank you for your time.

From: [thom.laz](#)
To: [ECY RE CSPA RULE](#)
Subject: ecology
Date: Monday, August 26, 2013 9:21:40 PM

why can't we list companies who send us cadmium and lead ladened [and other toxins] toys as TERRORISTS, and make it illegal to do business with them.

From: [Steven Schaeffer](#)
To: [ECY RE CSPA RULE](#)
Subject: FW: Proposed amendments to the Children's Safe Product Act Reporting Rule
Date: Monday, July 29, 2013 11:46:58 AM

To Whom It May Concern,

Comment for amendment to the Children's Safe Product Act Reporting Rule: Why is styrene (CAS # 100-42-5) on the list of chemicals of concern to children? As a precursor to Polystyrene (PS), styrene will be a necessary component of one of the most common consumer plastics. Doesn't the addition of styrene on the CHCC list result in all PS products being subject to report even when they not intended for food contact or for use in a microwave where chemical leakage is of concern?

Thank you,

Steven Schaeffer, Director of Compliance I PTI Group Inc. | Phone: 636-240-4741 Ext. 15 | Fax: 636-272-1988 | Website: www.ptigroupinc.com |

-----Original Message-----

From: Grice, Joshua (ECY) [<mailto:jogr461@ECY.WA.GOV>]
Sent: Monday, July 29, 2013 11:31 AM
To: Grice, Joshua (ECY)
Subject: FW: Proposed amendments to the Children's Safe Product Act Reporting Rule

Hello CSPA Database Users,

See below for a message about proposed amendments to the Children's Safe Product Act Reporting Rule.

Joshua A. Grice
Research Analyst
Reducing Toxic Threats Initiative
Washington State Department of Ecology
(360) 407-6786
joshua.grice@ecy.wa.gov

-----Original Message-----

From: Joshua Grice [<mailto:jogr461@ECY.WA.GOV>]
Sent: Monday, July 29, 2013 9:33 AM
To: CHILDRENS-SAFE-PRODUCTS@LISTSERV.WA.GOV
Cc: Grice, Joshua (ECY)
Subject: Proposed amendments to the Children's Safe Product Act Reporting Rule

The Department of Ecology is proposing to amend the Children's Safe Products - Reporting Rule, Chapter 173-334 WAC. The rule proposal will be published in the Washington State Register on August 7, 2013. Under this chapter, manufacturers of children's products must report on the presence of certain chemicals in children's products.

This rule making would amend Chapter 173-334 WAC to:

- Remove n-butanol (CAS #71-36-3) from the reporting list of chemicals
- Add tris(1,3-dichloro-2-propyl)phosphate (TDCPP) (CAS #13674-87-8) to the reporting list of chemicals. The Washington Department of Health has also confirmed that TDCPP meets the toxicity and exposure criteria to be included on the CHCC list. For more information visit: <http://www.ecy.wa.gov/programs/swfa/cspa/pdf/TDCPP.pdf>

This rule making is in response to new information associated with petitions to the Agency.

Public Hearing
August 27, 2013, 6pm

Location: Washington State Department of Ecology Headquarters,
300 Desmond Drive SE
Lacey, WA

Submit your comments – comments must be received by 12:00 midnight September 6, 2013.

You can give us your official comments in the following ways:

1. Testify or submit written comments at the public hearing.
2. Email your comments to: csparule@ecy.wa.gov
3. Mail comments to:
Department of Ecology
Joshua A. Grice
PO Box 47600
Olympia, WA 98504-7600
4. Fax: (360) 407-6102

Expected Adoption Date

Ecology expects to adopt this rule no earlier than October 16, 2013. The first reports that must include the presence of TDCPP will be due February 28, 2015.



August 27, 2013

Washington State Department of Ecology
Headquarters Building
300 Desmond Drive SE
Lacey, WA 98504

Re: Public Hearing: Chapter 173-334WAC, Children's Safe Product Act (CSPA)
Amendment to add tris (1,3-dichloro-2-propyl) phosphate (TDCPP) (CAS # 13674-87-8) to the reporting list of chemicals.

Washington State Nurses Association (WSNA) strongly supports adding Chlorinated Tris (1,3-dichloro-2-propyl) phosphate (TDCPP) to the Reporting List of Chemicals of High Concern for Children and we have been active in this pursuit over the last year working closely with Washington Toxics Coalition in its discussions with Ecology.

Tri (2, 3 dichloropropyl) phosphate (TDCPP), a known carcinogen, is also a known DNA mutagen. Studies also suggest that it is an endocrine disruptor and a reproductive toxicant.¹ Further studies suggest that TDCPP is a neurotoxin, and in vitro studies TDCPP is toxic to developing brain cells.

WSNA supported the passage of the Children's Safe Product Act in 2008, and we were especially pleased regarding the second part of the act authorizing Ecology to develop the Reporting List of Chemicals remained intact. In fact, we strongly support the ability to add further chemicals to this list in the future. This list has provided critical information on what companies are using and what their chemical substitutes are; and as more and more data gaps on human health effects get filled in on chemicals, it only makes sense to have the ability to add more chemicals to the Reporting List of Chemicals.

Thank you,

Karen R. Bowman, MN, RN, COHN-S
Environmental Health Specialist
Washington State Nurses Association
(206) 617-0844
karen@karenbowman.com

¹ Betts, Kellyn. (May 2013). Exposure to tdcpp appears widespread. *Environ Health Perspect* 121:A150 (2013).
<http://dx.doi.org/10.1289/ehp.121-a150>. Retrieved August 26, 2013 @ <http://ehp.niehs.nih.gov/121-a150>

September 6, 2013

Mr. Joshua Grice
Department of Ecology
PO Box 47600
Olympia, WA 47600
VIA Email: csparule@ecy.wa.gov

Dear Mr. Grice:

Please accept these comments on behalf of the Washington Toxics Coalition regarding amending Chapter 173-334 WAC, Children's Safe Product Reporting Rule to add tris (1,3-dichloro-2-propyl)phosphate (TDCPP) (CAS # 13674-87-8) to the reporting list of chemicals. We fully support the addition of TDCPP to the list of chemicals and respectfully request the agency take this rulemaking opportunity to add other chemicals that meet the legal criteria for inclusion on the Chemicals of High Concern for Children (CHCC) list.

TDCPP

TDCPP should be added to the CHCC list for the following reasons:

1. The Department of Health has confirmed that TDCPP meets the toxicity and exposure criteria to be included on the list.
2. In late 2011, the State of California made a determination that TDCPP causes cancer and added it to their list of Proposition 65 (Prop 65) chemicals.
3. Recent testing demonstrates it is widely used in products. TDCPP has been detected in the foam of children's products including changing pads, bassinet pads, and car seats. These are products that babies and older children contact for extended periods of time, and the flame retardant has been detected at levels averaging 2.6% and ranging up to 5%. When Washington Toxics Coalition commissioned testing of 20 foam-containing children's products in 2011, TDCPP was found in 80% of the products.
4. TDCPP has been widely detected in house dust as well as in indoor air, breast milk, urine, surface water, and fish.

* ESTABLISHED 1981 *

Reasons for Adding Additional Chemicals that Meet the Legal Criteria

There are several important reasons that the Department of Ecology (Ecology) should add other chemicals that meet the legal criteria in this rulemaking.

1. It is important to stay ahead of the curve and ensure companies are not just switching to chemicals that are high priority chemicals but aren't yet on the reporting list. We already know that many companies have agreed to phase out TDCPP, but it is unclear what they are using. Particularly for flame retardants, it makes sense to identify as many as possible that meet the legal criteria and add them to the list. This way the public and the agencies will have the best chance at knowing what flame retardants companies have moved to as a replacements for polybrominated biphenyl ethers (PBDEs), Tris (2-chloroethyl) phosphate (TCEP) and TDCPP.
2. The work to identify additional chemicals that meet the legal criteria has already been done and the agency should now be regularly adding batches of chemicals to the CHCC list. It took more than three years for the Departments of Health and Ecology and the University of Washington (UW) Pediatric Specialty Unit to develop a comprehensive list of chemicals that met the criteria in the law. It is more efficient to take batches of chemicals from that list rather than to wait for petitions and add one or two chemicals at a time. Rulemaking takes significant resources and is not typically carried out more than once every 3-4 years.
3. Ecology's reporting list has already proven to be an extremely valuable tool for state agencies and the public to obtain information about what chemicals are in products marketed for use by children. For example, it was because of reporting under the Children's Safe Products Act (CSPA) that we learned that Graco is now using the flame retardant tetrabromobisphenol A (TBBPA) in baby and children's products. This information helps consumers make decisions and helps Ecology prioritize action, particularly with regard to helping businesses find safer alternatives.
4. Adding chemicals to the list does not increase the workload burden on the agency. The majority of work has already been done to identify the chemicals and set up the database for reporting.

Additional Chemicals Should be Added to the Reporting List

We propose the following chemicals in these use categories be added in this rule making because they meet both the toxicity and exposure criteria in the law. In addition, all of them have been already identified as meeting the criteria in the law as part of the original CSPA rulemaking process.

1) Flame retardants

A) Short Chain Chlorinated Paraffins (SCCPs)(CAS 85535-84-8)

Toxicity: SCCPs meet the toxicity criteria in RCW 70.240.010(6)(e) because they are persistent, bioaccumulative, and toxic (PBT) at low levels. These chemicals are listed on authoritative PBT lists including Washington State's and EPA's.

<http://www.ecy.wa.gov/programs/swfa/pbt/list.html>

Exposure: SCCPs meet the exposure criteria in RCW 70.240.030 (a), (b) and (c). According to EPA:

- a) SCCPs are used as secondary plasticizers and as flame retardants in plastics, especially PVC. SCCPs are also used as plasticizers and flame-retardant additives in a variety of consumer products including: rubber formulations, paints and other coatings, and adhesives and sealants.
- b) SCCPs have been measured in a variety of environmental media including air, sediment, surface waters, and wastewater. SCCPs have also been measured in a variety of biota, including freshwater aquatic species, marine mammals, and avian and terrestrial wildlife. In addition, SCCPs have been detected in samples of human breast milk from Canada and the United Kingdom, as well as in a variety of food items from Japan and various regions of Europe.

<http://www.epa.gov/opptintr/existingchemicals/pubs/ecactionpln.html#posted>

B) Dechlorane Plus (CAS 13560-89-9)

Toxicity: Dechlorane Plus meets the toxicity criteria in RCW 70.240.010 (6) (e) because it is a listed European Union Persistent Bioaccumulative Toxic chemical (PBT).

Exposure: Dechlorane Plus meets the exposure criteria in RCW 70.240.030 (b) and (c). According Ecology, the chemical has been found in house dust. There is additional information demonstrating it has been found in sediment, plankton, mussels, and fish, and recent evidence indicates it can bioaccumulate. It is incorporated into plastics that are used in consumer products used or present in the home.

This compound was on Ecology's original list of chemicals meeting the criteria for toxicity and exposure, but was eliminated because it is also a registered pesticide. Its use as a pesticide is irrelevant and it should be listed.

C) Tris (1-chloro-2-propyl) phosphate (TCPP) (CAS 13674-84-5)

Toxicity: TCPP meets the toxicity criteria in RCW 70.240.010(6)(b) because it is structurally similar to the other cancer-causing Tris flame retardants (TCEP and TDCPP). They should be treated as a family of cancer-causing flame retardants. The European Union recently did this when they proposed regulatory standards for all three tris flame retardants in toys and cited the structural similarity of TCPP to the others as the reason for its inclusion in the rule.

<http://www.openpr.com/news/269759/EU-to-Strengthen-Chemical-Regulation-on-BPA-and-Flame-Retardants-in-Toys.html?SID=830c92292165dfed13c44e9b6b0a43f9>

In addition, basic laboratory testing shows that TCPP has low to moderate acute toxicity and moderate to high aquatic toxicity. Full testing on reproductive and immune effects has not been conducted, but one study found that hens ceased egg production after treatment with TCPP. Recent research found that chicken embryos exposed to TCPP showed developmental effects potentially caused by thyroid hormone pathway disruption.

Exposure: TCPP meets the exposure criteria in RCW 70.240.030 (b) and (c).

TCPP has been found in discharges from homes and industries. It is known to leach out of foam into air, and has been found in air samples in cars, offices, and furniture stores. Testing of new baby products by Washington Toxics Coalition in 2011 found TCPP in 14 of 20 products, at levels up to 3.8%.

D) Bis (2-ethylhexyl) tetrabromophthalate or 1,2-benzene dicarboxylic acid (TBPH) (CAS 26040-51-7)

Toxicity: TBPH meets the developmental toxicity criteria in RCW 70.240.010(6) (a) according to EPA's Toxic Substances Control Act (TSCA) workplan chemical methods document.

<http://www.epa.gov/oppt/existingchemicals/pubs/wpmethods.pdf>

According to Ecology TBPH is also a European Union PBT chemical.

Exposure: TBPH meets the exposure criteria in RCW 70.240.030 (b) and (c). According to EPA it is used in consumer products and it is present in indoor environments. TBPH is a substitute for PBDEs and Tris flame retardants in polyurethane foam so it is particularly important that information be obtained about its use.

<http://www.epa.gov/oppt/existingchemicals/pubs/wpmethods.pdf>

2) Plastic Building Block Chemicals:

There are many plastics used in children's products and the existing CHCC list is not adequate to capture some of the most widely used chemicals. The following chemicals should be added to the list:

(A) 4,4'-Methylene bis (2-chloroaniline) (CAS 101-14-4)

Toxicity: The chemical meets the toxicity criteria in RCW 70.240.010(6)(b) for carcinogenicity according to EPA's TSCA workplan chemical methods document. California has also listed it as a Prop 65 carcinogen.

<http://www.epa.gov/oppt/existingchemicals/pubs/wpmethods.pdf>.

Exposure: The chemical also meets the exposure criteria in RCW 70.240.030 (b) and (c). According to EPA it is widely used in consumer products and it is present in the ambient air.

(B) 4,4 Diaminodiphenylmethane (CAS 101-77-9)

Toxicity: The chemical meets the toxicity criteria in RCW 70.240.010(6)(b) for carcinogenicity. It was identified by the State of California as a carcinogen in 1988 and is a Prop 65 chemical.

Exposure: The chemical meets the exposure criteria in RCW 70.240.030 (c) because it is added or present in consumer products.

Ecology citation for presence in consumer products:

Danish Environment Protection Agency (DEPA) No. 32, Malmgren-Hansen, Bjorn, Olesen, Steen, Pommer, Kirsten, Funch, Lis Winther, Pedersen, Eva, Willum, Ole, and Olsen, Stig. Survey of chemical substances in consumer products: Emission and evaluation of chemical substances from selected electrical and electronic products, 1-80. 2003. Survey of chemicals substances in consumer products.

(C) Epichlorohydrin (CAS 106-89-8)

Toxicity: The chemical meets the toxicity criteria in RCW 70.240.010(6)(b) for carcinogenicity. It was identified by the State of California as a carcinogen in 1987 and is a Prop 65 chemical.

Exposure: The chemical meets the exposure criteria in RCW 70.240.030 (c) because it is added or present in consumer products.

Ecology citation for presence in consumer products:

Danish Environment Protection Agency (DEPA) No. 32, Malmgren-Hansen, Bjorn, Olesen, Steen, Pommer, Kirsten, Funch, Lis Winther, Pedersen, Eva, Willum, Ole, and Olsen, Stig. Survey of chemical substances in consumer products: Emission and evaluation of chemical substances from selected electrical and electronic products, 1-80. 2003. Survey of chemicals substances in consumer products.

(D) 1,3 Butadiene (CAS 106-99-0)

Toxicity: The chemical meets the toxicity criteria in RCW 70.240.010(6)(a) and (b) for developmental toxicity and carcinogenicity. It was identified by the State of California as a carcinogen in 1987 and in 2004 as a developmental toxicant. It is a Prop 65 chemical.

Exposure: The chemical meets the exposure criteria in RCW 70.240.030 (c) because it is added or present in consumer products.

Ecology citations for presence in consumer products:

CAARB. Report to the California Legislature: Indoor Air Pollution in California. 2005.

Zhu, J., Newhook, R., Marro, L., & Chan, C. 2005. Selected Volatile Organic Compounds in Residential Air in the City of Ottawa, Canada. Environ.Sci.Technol., 39(11): 3964-6971.

Danish Environment Protection Agency (DEPA) No. 32, Malmgren-Hansen, Bjorn, Olesen, Steen, Pommer, Kirsten, Funch, Lis Winther, Pedersen, Eva, Willum, Ole, and Olsen, Stig. Survey of chemical substances in consumer products: Emission and evaluation of chemical substances from selected electrical and electronic products, 1-80. 2003. Survey of chemicals substances in consumer products.

(E) Toluene diisocyanate (CAS 26471-62-5)

Toxicity: The chemical meets the toxicity criteria in RCW 70.240.010 (b) for carcinogenicity. It has been identified in 1989 as a carcinogen by the state of California and added to the list of Prop 65 chemicals.

Exposure: The chemical meets the exposure criteria in RCW 70.240.030 (c) because it is added or present in consumer products.

Ecology citations for presence in consumer products:

Danish Environment Protection Agency (DEPA) No. 32, Malmgren-Hansen, Bjorn, Olesen, Steen, Pommer, Kirsten, Funch, Lis Winther, Pedersen, Eva, Willum, Ole, and Olsen, Stig. Survey of chemical substances in consumer products: Emission and evaluation of chemical substances from selected electrical and electronic products, 1-80. 2003. Survey of chemicals substances in consumer products.

3) Metals

The recent reporting to the agency shows that there are numerous metals used in children's products, but a number of toxic metals are missing from the CHCC list even though they meet the exposure and toxicity requirements. We recommend the following metals be added because they have all been identified by the state of California as carcinogens and they are added or present in children's and/or consumer products.

(A) Nickel and Nickel Compounds (CAS 7440-02-0)

Ecology children's product and consumer product citations:

DEPA No. 67, Svendsen, Nanna, Pederson, Soren F., Hansen, Ole Chr., Pedersen, Eva, Bernth, Nils, and Danish Technological Institute. Survey and release of chemical substances in "slimy" toys. 2005. Survey of Chemical Substances in Consumer Products.

DEPA No. 84, Svendsen, Nanna, Bjarnov, Erik, and Poulsen, Pia Brunn. Survey as well as health assessment of chemical substances in school bags, toy bags, pencil cases and erasers, 1-153. 2007. Survey of Chemical Substances in Consumer Products.

DEPA No.93, Hansen, Paul Lyck, Tonning, Kathe, Malmgren-Hansen, Bjorn, Jacobsen, Eva, and Danish Technological Institute. Survey and health assessment of chemical substances in hobby products for children. 2008. Survey of Chemical Substances in Consumer Products.

DEPA No. 51, Mapping and release of chemical substances from products made of chloroprene, 2004. Survey of Chemical Substances in Consumer Products.

(B) Beryllium (CAS 7440-47-3)

Ecology consumer product citations:

DEPA No. 65, Bernth, Nils, Hansen, Ole Chr., Hansen, Steen Faergemann, and Pedersen, Eva. Survey of chemical substances in kohl and henna products. 2005. Survey of chemical substances in consumer products.

Centers for Disease Control. Third National Report on Human Exposure to Environmental Chemicals. 2005

4) Dyes and Pigments

There were 1,000 reports for pigments and dyes in the first two rounds of reports submitted under the CSPA rule. This indicates a significant use of chemicals for this purpose in children's products. It is important that the list of chemicals used for this purpose is as complete as possible. The following chemicals used for pigments and

dyes meet the criteria and should be added to the list. These chemicals have been listed by the state of California as carcinogens under Prop 65 and are added or present in consumer products.

(A) 6-Methoxy-m-toluidine (CAS 120-71-8), 4,4 Methylenedi-otoluidine (CAS 838-88-0), 2-Naphthylamine (CAS 91-59-8) and, Benzidene and salts (CAS 92-87-5).

Ecology citation for presence in consumer products:

Danish Environment Protection Agency (DEPA) No. 32, Malmgren-Hansen, Bjorn, Olesen, Steen, Pommer, Kirsten, Funch, Lis Winther, Pedersen, Eva, Willum, Ole, and Olsen, Stig. Survey of chemical substances in consumer products: Emission and evaluation of chemical substances from selected electrical and electronic products, 1-80. 2003. Survey of chemicals substances in consumer products.

(B) CI Solvent Yellow 3 (CAS 97-56-3)

Ecology citation for presence in consumer products:

DEPA No. 94, Strandesen, Maria and Poulsen, Pia Brunn. Survey and health assessment of chemical substances in jewelleryes. 2008. Survey of Chemical Substances in Consumer Products.

5) Other chemicals that should be added that meet the legal criteria and are used for multiple purposes.

(A) 1,2 Dibromomethane, Ethylene dibromide (CAS 106-93-4) and 1,2 Dichloroethane, Ethylene dichloride (CAS 107-06-2)

These two chemicals meet the toxicity requirements because they are listed on California's Prop 65 list along with numerous other authoritative lists and the following sources of information clearly demonstrate they meet the exposure criteria:

Rowe, B. L., Toccalino, P. L., Moran, M. J., Zogorski, J. S., & Price, C. V. 2007. Occurrence and Potential Human-Health Relevance of Volatile Organic Compounds in Drinking Water from Domestic Wells in the United States. *Environmental Health Perspectives*, 115(No. 11): 1539-1546.

US Environmental Protection Agency Drinking Water Contaminant Standards.
<http://www.epa.gov/safewater/contaminants/index.html>.

CAARB. Report to the California Legislature: Indoor Air Pollution in California. 2005.

Zhu, J., Newhook, R., Marro, L., & Chan, C. 2005. Selected Volatile Organic Compounds in Residential Air in the City of Ottawa, Canada. *Environ.Sci.Technol.*, 39(11): 3964-6971.

Danish Environment Protection Agency (DEPA) No. 32, Malmgren-Hansen, Bjorn, Olesen, Steen, Pommer, Kirsten, Funch, Lis Winther, Pedersen, Eva, Willum, Ole, and Olsen, Stig. Survey of

chemical substances in consumer products: Emission and evaluation of chemical substances from selected electrical and electronic products, 1-80. 2003. Survey of chemicals substances in consumer products.

(B) Trichloroethylene (CAS 79-01-6)

This chemical solvent meets the toxicity requirements because it is listed on California's Prop 65 list and IRIS for cancer and the following sources of information clearly demonstrate it meets the exposure criteria:

Rowe, B. L., Toccalino, P. L., Moran, M. J., Zogorski, J. S., & Price, C. V. 2007. Occurrence and Potential Human-Health Relevance of Volatile Organic Compounds in Drinking Water from Domestic Wells in the United States. *Environmental Health Perspectives*, 115(No. 11): 1539-1546.

US Environmental Protection Agency Drinking Water Contaminant Standards.
<http://www.epa.gov/safewater/contaminants/index.html>.

CAARB. Report to the California Legislature: Indoor Air Pollution in California. 2005.

Zhu, J., Newhook, R., Marro, L., & Chan, C. 2005. Selected Volatile Organic Compounds in Residential Air in the City of Ottawa, Canada. *Environ.Sci.Technol.*, 39(11): 3964-6971.

Cohn, P., Klotz, J., Bove, F., Berkowitz, M., & Fagliano, J. 1994. Drinking Water Contamination and the Incidence of Leukemia and Non-Hodgkin's Lymphoma. *Environmental Health Perspectives*, 102: 556-561. 1994.

Squillace, P. J., Scott, J. C., Moran, M. J., Nolan, B. T., & Kolpin, D. W. 2002. VOCs, Pesticides, Nitrate, and Their Mixtures in Groundwater Used for Drinking Water in the United States. *Environ.Sci.Technol.*, 36: 1923-1930.

Adgate, J. L., Church, T. R., Ryan, A. D., Ramachandran, G., Fredrickson, A. A., Stock, T., Morandi, M. T., & Sexton, K. 2004. Outdoor, Indoor, and Personal Exposure to VOCs in Children. *Environmental Health Perspectives*, 112(14): 1386-1392.

CAARB. Common Indoor Sources of Volatile Organic Compounds. 95-392. 1999.

Weisel, C. P., Alimokhtari, S., & Sanders, P. F. 2008. Indoor Air VOC Concentrations in Suburban and Rural New Jersey. *Environ.Sci.Technol.*

(C) Acrylimide (CAS 79-06-1)

This chemical used to manufacture polymers meets the toxicity requirements because it is listed on California's Prop 65 list and numerous other authoritative lists for cancer. It also meets the exposure criteria according to this source:

US Environmental Protection Agency Drinking Water Contaminant Standards.
<http://www.epa.gov/safewater/contaminants/index.html>.

(D) 1,2,3-Trichloropropane (CAS 96-18-4)

This chemical meets the toxicity requirements because it is listed on California's Prop 65 list and other authoritative lists for cancer. The following source demonstrates it meets the exposure criteria:

Rowe, B. L., Toccalino, P. L., Moran, M. J., Zogorski, J. S., & Price, C. V. 2007. Occurrence and Potential Human-Health Relevance of Volatile Organic Compounds in Drinking Water from Domestic Wells in the United States. *Environmental Health Perspectives*, 115(No. 11): 1539-1546.

Thank you for the opportunity to provide these comments. Please contact me at 206-200-2824 if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Laurie Valeriano", with a long horizontal flourish extending to the right.

Laurie Valeriano
Executive Director

Appendix B: Transcripts from public hearings.

Lacey, Washington – August 27th, 2013

Transcript of Public Hearing
Proposed Revisions to Chapter 173-334 WAC
Ecology Headquarters, Lacey
August 27, 2013

Transcribed by: Beth Gill – Secretary Senior, Waste 2 Resources

Reviewed by: Kyle Dorsey – Rules & Policy Specialist, Waste 2 Resources

Public Meeting on Tuesday, August 27 at 6:20 p.m.

KD: I'm Kyle Dorsey, Hearings Officer for tonight's hearing. This evening we are conducting a hearing on proposed amendments to Chapter 173-334 of the Washington Administrative Code, the Children's Safe Products Reporting Rule. Let the record show that it is 6:20 p.m. on August 27, 2013 and this hearing is being held in the main auditorium of the Department of Ecology Headquarters Office located at 300 Desmond Drive in Lacey, Washington. Legal notice of this hearing was published in the Washington State Register on July 22, 2013 as Washington State Register Number WSR 13-15-129. In addition, notices of the hearing were sent to approximately 538 subscribers to the Ecology's Children's Safe Products Listserve on August 26, 2013, to approximately 1,433 subscribers to Ecology's WACTrack Listserve on July 22, 2013, to approximately 537 subscribers to Ecology's Children's Safe Products Listserve on July 29, 2013 and a news release was sent to approximately 3,284 subscribers and media outlets on July 30, 2013. Notice was also published in the Daily Journal of Commerce on July 24, 2013. I will be calling people who have indicated they wish to provide testimony based on the order your name appears on the sign-in sheet. Once everyone has indicated they would like to testify and has had the opportunity, I will open it up for others. When I call your name, please come to the front to the desk here and state your name and address for the record, and then please speak clearly so that we can get a good recording of your testimony. We will begin with Erika Schreder.

ES: Good evening. My name is Erika Schreder and I'm Science Director with Washington Toxics Coalition. The Washington Toxics Coalition supports Ecology's proposal to add TDCPP, also known as Chlorinated Tris, to the reporting list of Chemicals of High Concern to Children. Washington Toxics Coalition petitioned Ecology to add TDCPP because recent testing indicates it is used extensively in children's products and a state agency, the State of California, has now made a determination that it causes cancer. Thus, it meets the legal requirements for a chemical to be listed on the reporting list of Chemicals of High Concern to Children. TDCPP was designated as a probably carcinogen by the Consumer Product Safety Commission in 2006. In late 2011, the State of California listed the compound as a carcinogen under Prop. 65. TDCPP has been detected in the foam of children's products including changing pads, basinet pads and car seats. These are products that babies and older children contact for extended periods of time, and the flame retardant has been detected at levels averaging 2.6% and ranging up to 5%. When Washington Toxics Coalition commissioned testing of 20 foam containing children's products in 2011, TDCPP was found in 80% of the products. In addition, TDCPP has been widely detected in house dust as well as indoor air, breast milk, urine, surface water and fish. Ecology's reporting list has already proved to be an extremely valuable tool for state agencies and the public to obtain information about what chemicals are in products marketed for use by children. For example, it was because of reporting under the Children's Safe Products Act that we learned that Graco is now using the flame retardant Tetrabromobisphenol A in baby and children's products. This information helps consumers make decisions and helps Ecology prioritize action, particularly with regard to helping businesses find safer alternatives. For these reasons, we urge Ecology to expand the list to add additional chemicals that meet the criteria for inclusion. For example, short chain chlorinated paraffins are flame retardants that have been identified by EPA as persistent bioaccumulative toxic chemicals. They've been detected in air, sediment, surface waters and waste water, as well in biota including fresh water aquatic species, marine mammals, birds, and terrestrial wildlife. In addition, they have been detected in samples of breast milk from Canada and the United Kingdom. As PBT compounds that have been detected in biomonitoring studies, short chain chlorinated paraffins meet the criteria for addition to the reporting list. We will be providing details on additional compounds that should be added to the list in our written testimony. Thank you.

KD: Thank you Erika. Next to testify: Karen Borman?

KB: Bowman.

KD: Bowman – sorry.

KB: No problem. For the record, my name is Karen Bowman. My address is 12223 Fremont Avenue North, Seattle, Washington 98133. I'm the Environmental Health Specialist for the Washington State Nursing Association, and we're in strong support of adding Chlorinated Tris, TDCPP to the reporting list of Chemicals of High Concern for Children and we have been active in this pursuit over the last year working closely with Washington Toxics and their discussions with Ecology. We know that TDCPP is a known carcinogen. It's also a known DNA mutagen. Studies also suggest that it's endocrine disrupter and a reproductive toxicant. Further studies also suggest that TDCPP is a neurotoxin and in vitro studies TDCPP is toxic to brain cells. WSNA, the State Nurses' Association, supported the passage of the Children's Safe Product Act in 2008, and we were especially pleased to see that the reporting list of chemicals remained intact. In fact, we strongly support the ability to add further chemicals to the list in the future. This list has provided critical information on what companies are using and what their chemical substitutes are, and as more data comes in about the health effects on these chemicals, it only makes sense that we can add more and more chemicals as the data comes in to this list. Thank you.

KD: Is there anyone else that wants to testify this evening? OK, very well. That will conclude our testimony for the evening. For submitting written comments - if you would like to submit written comments to Ecology for the formal record, please remember they must be received at the department by 12:00 a.m. midnight on September 6, 2013. Please send all comments to Joshua Grice, PO Box 47600, Olympia, Washington, 98504-7600 or email Joshua at joshua.grice@ecy.wa.gov. Your comments may also be faxed to (360) 407-6102.

All testimony received at this hearing along with all written comments received at the Department of Ecology no later than 12:00 midnight on September 6, 2013 will be part of the official hearing record for this proposal. Ecology will send notice about the Concise Explanatory Statement publication to everyone that provided written comments or oral testimony on this rule proposal and provided correct contact information, everyone that signed in for today's hearing and provided correct contact information, and other interested parties with current contact information on the agency's mailing lists for this rule. Concise Explanatory Statement will include the agency's response to questions and issues of concern that were submitted during the public comment period. If you would like to receive a copy but did not give us your contact information, please let one of the staff at this hearing know or contact Joshua Grice at Ecology.

Next steps: the next steps are to review comments, prepare the Concise Explanatory Statement and other rule documentation, and make a determination whether to adopt the rule. Ecology Director Maia Bellon will consider rule documentation and staff recommendations before making a decision about adopting the proposed rule. If the proposed rule is adopted, it will take effect on the 31st day after filing with the Office of the Code Reviser. Adoption is currently scheduled for October 16, 2013 pending staff review and the decision of Director Bellon. If we can be of further help to you, please do not hesitate to ask or you can contact Joshua Grice if you have other questions.

On behalf of the Department of Ecology, thank you for coming. I appreciate your cooperation and courtesy.

Let the record show that this hearing is adjourned at 6:29 p.m.