

PUBLIC WORKSHOP
STATE OF CALIFORNIA
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

PUBLIC WORKSHOP ON TOLUENE IN NAIL PRODUCTS

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Reported by:
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Dr. Eric Sciullo, Staff Toxicologist, Health and Ecological Risk Organization

Kerry Rasmussen, Public Participation Specialist

Andre Algazi, Senior Environmental Scientist

Dr. Dicle Yardimci, Senior Hazardous Substances Engineer

PUBLIC TESTIMONY (* Via online/telephone)

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MS. RASMUSSEN: Good morning. Welcome to the workshop on the Department of Toxic Substances Control or DTSC's proposal to list toluene in nail products as a Priority Product. My name is Kerry Rasmussen and I am a Public Participation Specialist and I will be facilitating this workshop this morning.

Let me take this moment to welcome those of you that are joining us via the Webcast. On behalf of DTSC I would like to welcome all of you and thank you all so much for participating in today's workshop.

Before we begin I have a few announcements. The nearest restrooms and water fountains are out the double doors to your left all the way to the end of the hallway and to the left a little bit more and on your right.

In case of emergency such as a fire alarm please take your valuables with you if we have to leave the room, calmly exit any one of the exits here in the room. If we need to go down a floor please take the stairs. Please do not take the elevator.

If we have to leave the building entirely there is a evacuation zone across the street at Cesar Chavez Park. Visitors are asked to congregate towards the center of the park, and DTSC staff are at the corner of 9th and J. There should be signs there.

1 Please silence all cell phones and electronic
2 devices at this time. And please make sure you have a copy
3 of the agenda, so you can follow along. Please save any
4 clarifying questions or comments until after the
5 presentation today.

6 The workshop presentation slides are available on
7 the Safer Consumer Products website known as SCP Workshops
8 and Events webpage. The workshop will be recorded and later
9 posted to the SCP website.

10 Our distinguished panel members include: Dr.
11 Meredith Williams, SCP Deputy Director and Acting DTSC
12 Director; Karl Palmer, Branch Chief and Acting Deputy
13 Director for the SCP Program; Andre Algazi, Supervisor and
14 Senior Environmental Scientist; Dr. Eric Sciullo, Staff
15 Toxicologist and Presenter; Dr. Dicle Yardimci, Senior
16 Hazardous Substances Engineer and Acting Team Lead.

17 Today's program will be as follows. First we'll
18 start off by a welcome by Dr. Meredith Williams, followed by
19 an introduction by Karl Palmer. This will be followed by a
20 brief presentation on the draft product-chemical profile on
21 nail products containing toluene by Eric Sciullo.

22 Next, we will take clarifying questions from the
23 audience. This will be followed by public comments. If you
24 have a pre-printed comment document you may turn that in or
25 if you are online seeing this via the Web you may email us

1 at saferconsumerproducts@dtsc.ca.gov. This will be the time
2 to make all of your comments and if you turn them in then
3 we'll put them in the correct order and we will call you up
4 or we will bring the microphone to you, to read it into the
5 microphone.

6 This workshop will adjourn when there are no
7 additional comments or at 12:00 o'clock noon, whichever
8 comes first.

9 Now, please join me in welcoming Dr. Meredith
10 Williams to give the Welcome address.

11 DR. WILLIAMS: Thank you, Kerry.

12 Good morning, everybody. Thank you for joining us
13 remotely or in the room. We are very excited about today.
14 In fact, my comments are going to be extremely brief,
15 because I am very eager to head on to the matter at hand.
16 It seems like maybe it's wait and hurry up. The Department
17 has been looking at nail salon products since 2012 and so
18 it's a long-standing area of concern for us and Karl Palmer
19 will give a little bit of the history of the work of the
20 Department.

21 We're just excited to get on to the next step of
22 providing protections against some of the problems
23 associated with these products. And then to apply the Safer
24 Consumer Products framework again to a different subject and
25 a different set of products, so without further ado I'm

1 actually going to turn it right over to Karl, then.

2 MR. PALMER: Thank you, Meredith

3 Again, thanks everyone for being here and being
4 online.

5 Yeah, I was thinking this weekend about our nail
6 salon/nail product journey at DTSC. And as Meredith said
7 we've been working on it for quite a while. And actually
8 this weekend I was listening to Secretary Blumenfeld's
9 podcast "Podship Earth" which featured the issue of nail
10 products and nail salons. And in that podcast I was
11 reminded that probably nine or ten years ago I attended a
12 meeting in the Bay Area that I was invited from the Healthy
13 Nail Salon Collaborative. And Julie Liou on the podcast was
14 relating a story from that meeting.

15 And at face value the meeting was to get industry
16 and advocacy folks and government folks to talk about issues
17 related to product safety and workers. And but the
18 highlight or rather the lowlight of the meeting was when two
19 representatives from a couple of nail product companies got
20 into a debate about whose products were safer. And what
21 that culminated in, was these two gentlemen getting up and
22 each drinking, literally drinking their products, to show
23 how safe it was which was shocking to most of us there. But
24 what it really did was at the time it highlighted that there
25 really was an incredible lack of data and information,

1 scientific study that was accessible to government, to the
2 public about what was in nail products. And what the
3 potential problems were there.

4 So soon thereafter, stimulated by that meeting,
5 the Department did a short look at some products in the
6 market, because some of them were advertised as being 3-Free
7 or 5-Free from some specific chemicals. And we took a quick
8 look at that and found that there were some inconsistencies.
9 Concurrently the Legislature was passing the Green Chemistry
10 Law and we were in the process of adopting our Safer
11 Consumer Products Regulations.

12 And so interestingly, five years ago today we
13 announced our first three products that we would be focusing
14 on in our Safer Consumer Products Regulations. And as you
15 know, the intent of our regulations is to put a framework
16 out there that requires manufacturers do a thorough analysis
17 of alternatives to products that have the potential to cause
18 harm to people and the environment.

19 And so part of the challenge in this sector is,
20 much as it was ten years ago, there's still a lack of
21 complete information. We have a federal cosmetics law that
22 hasn't been meaningfully updated since 1938. We still have
23 challenges in getting good information both to government
24 and to consumers. So in furthering that process we're
25 looking at one product-chemical combination today and you're

1 going to hear about some other chemicals we are looking at.

2 And we're happy to continue this dialogue with
3 industry, advocacy, the public to get good information and
4 get good decisions made to meet our mutual goals of having
5 safe and effective products on the market.

6 So I'm just excited to hear Eric give you a
7 summary of our findings and the information we know. We're
8 a learning organization. It took us a few years to get
9 those first products out the gate. We've got a lot more
10 teed up coming and we're going to continue to learn. So
11 today we are hoping to share with you our information and
12 hear from you as well. And also hear in our formal comment
13 period, which close on April 1st if you don't have an
14 opportunity to give us input today please take the
15 opportunity to send us comments before April 1st.

16 So with that I'll just turn it over to Eric and
17 we'll get started on the details, so thanks for being here.

18 DR. SCIULLO: Thank you. Welcome for being here
19 today and to allow us the opportunity to announce DTSC's
20 propose to list toluene in nail products as a priority
21 product.

22 The Safer Consumer Product Regulations provide a
23 four-step process, with the second step being the evaluation
24 and identification of priority products. In this step there
25 are two primary determinants in recommending prioritization.

1 First, that there is potential for exposure to the Candidate
2 Chemical in the product. And second, that one or more
3 exposures have the potential to contribute to or cause
4 significant or widespread adverse impacts.

5 How we meet those criteria are specified in the
6 Safer Consumer Product Framework Regulations. And reaching
7 this point to the Priority Product phase is the result of
8 significant work and research across a wide field of areas.

9 Here's the overview of today's presentation. We
10 will begin by discussing our recommendation for prioritizing
11 toluene in nail products. And we will provide an overview
12 of all our efforts concerning nail products.

13 The technical basis for this proposal has been
14 fully described in our toluene Profile, which is available
15 at our CalSAFER website. This is a draft discussion, as we
16 do want to make sure to consider your input. We have
17 specific questions that were provided along with the
18 document that we'd like addressed. And our plan is to
19 incorporate that feedback into the profile and other
20 documentation as appropriate, as we prepare for rulemaking.

21 I'd like to walk you through some of the key
22 elements of the profile.

23 We defined our scope of products in two main
24 categories, the first of which is nail coatings. Nail
25 coatings are defined as any clear or colored paint, polish,

1 lacquer, enamel or gel product marketed or sold for
2 application to the fingernails or toenails. And listed here
3 are the types of products that would fall under this
4 category.

5 The second product category defined in the
6 profile, are nail polish thinners. They are defined as any
7 liquid product that is marketed or sold for the use of
8 reducing viscosity of nail coatings. They may be marketed
9 for the use of increasing the fluidity or restoring the
10 consistency of nail coatings.

11 Now that the products have been defined, the
12 chemical toluene can be defined as clear, colorless and most
13 importantly, volatile. Meaning it's capable of escaping
14 from the liquid phase and into the vapor or indoor air. It
15 is used in coatings to suspend the color to form a smooth
16 finish across the nail and to evenly adhere polish to nails.

17 The chemical toluene is listed on 9 of the 23
18 authoritative lists for hazard or exposure. The 9 lists are
19 presented on this slide in an abbreviated format, but I
20 encourage those interested to explore the CalSAFER site, the
21 Candidate Chemical Database and the toluene profile for a
22 more detailed description. But to summarize, the presence
23 of toluene on these lists indicates the well-established
24 nature of its hazard traits. That is to say it's
25 neurological, developmental, respiratory and dermal toxicity

1 are established endpoints that have been observed in the
2 scientific literature as a result of toluene exposure.

3 Please again see the toluene profile for the
4 complete list of hazard traits and studies. I would like to
5 take a few moments to describe these hazards in more detail.

6 Neurotoxicity is the principal hazard trait
7 described for toluene on five of the authoritative lists.
8 This is important in that it provides a high degree of
9 confidence in this hazard for toluene. This is in line with
10 the scientific literature, which demonstrates neurotoxicity
11 in human exposures and animal models.

12 The California Office of Environmental Health
13 Hazard Assessment or OEHHA has reviewed the literature with
14 respect to toluene and created a chronic or long-term
15 reference exposure level of 300 $\mu\text{g}/\text{m}^3$ for toluene in the
16 indoor air. This REL is the concentration level at or
17 below, which no adverse health effects are anticipated when
18 continuously inhaled over a person's lifetime.

19 Some examples of potential neurotoxic health
20 effects include dizziness, fatigue, headache and decreased
21 manual dexterity or motor function.

22 Toluene is also capable of developmental toxicity
23 and is listed as such according to three authoritative
24 lists. Human epidemiological studies have reported higher
25 risk for cosmetologists to have children with low birth

1 weight compared to other work sectors of the general
2 population. First, it should be noted that cosmetologists
3 are defined as both hair and nail salon workers as the same
4 in these studies. Second, the effects reported in these
5 studies were not attributed to toluene exposure alone.
6 However, it is noteworthy that developmental toxicity was
7 observed given that toluene is a developmental toxicant
8 present in some nail products. In other words, we're not
9 saying those who use these products will suffer from these
10 effects. Rather we are proposing these lines of evidence to
11 manufacturers to propose safer alternatives.

12 Developmental toxicity has also been observed in
13 studies investigating the intentional abuse of toluene and
14 this hazard trait has been well-documented in animal models
15 that have also consistently observed low birth weight
16 endpoints in offspring.

17 Toluene is capable of respiratory and dermal
18 toxicity. Studies have shown that toluene exposure results
19 in respiratory tract irritation when inhaled. It is
20 important to point out that the hazard traits described so
21 far are primarily a result of inhalation exposure and
22 represent the exposure pathway of primary importance and
23 toxicological significance. However, toluene is absorbed
24 through the skin and skin irritation is possible in the
25 event of accidental spills or dermal exposure.

1 This concludes the hazard trait summary for
2 toluene, but again I encourage those interested to read the
3 toluene profile for the complete list of hazard traits and
4 studies.

5 Having presented the hazard trait information, it
6 is important to describe the exposure characteristics for
7 toluene in more detail and it starts in the markets. Nail
8 products in salon services are extremely popular with
9 approximately 8.5 billion spent on nail services in the
10 United States in 2016. More than 100 million women in the
11 United States use nail products annually. And this number
12 is only expected to increase moving into the future.

13 In California, there are more than 9,000 nail
14 salons and approximately 130,000 licensed manicurists and
15 300,000 cosmetologists.

16 One piece of information that we received when
17 researching the market presence of toluene in nail products
18 was that they were on the decline and toluene was being
19 phased out of nail products. We did find evidence however,
20 that toluene is still found in a number of nail products.

21 For example, a 2016 Food & Drug Administration
22 study detected toluene in 26 out of the 34 products that
23 they investigated. DTSC's 2012 sampling study found toluene
24 in products as well. It has been reported as an ingredient
25 in greater than 40 nail coatings and one nail polish thinner

1 according to the California Safe Cosmetics Program Database.

2 Mintel's Global New Products Database identified
3 43 nail coating products introduced to the United States
4 retail market and 930 worldwide since 2006. Also, the
5 Environmental Working Group's Skin Deep Cosmetics Database
6 lists five nail products that contain toluene.

7 As mentioned previously, the inhalation of indoor
8 air is the most significant exposure route with regards for
9 the potential to cause adverse impacts. And is the primary
10 pathway that is being discussed today. The populations that
11 may be exposed to toluene-containing nail products include
12 nail salon workers, nail salon patrons, nail product
13 consumers, children, pregnant women and their fetuses. In
14 the United States 97 percent of nail technicians are female
15 and a majority are of childbearing age.

16 In California, nail technicians are primarily of
17 Vietnamese descent. Many of whom face workplace safety
18 challenges due to language barriers, limited education on
19 chemical exposure from products and limited availability in
20 the use of personal protective equipment or PPE. Combined
21 with the fact that they are primarily females of
22 childbearing age they represent a unique, sensitive
23 subpopulation and may be especially vulnerable from
24 exposure. In addition, their exposure time should be
25 considered greater than a typical 40-hour workweek or eight-

1 hour workday as a majority of technicians work extended
2 daily or weekly shifts.

3 Children that accompany their parents to work are
4 of concern as well, for there is evidence that children of
5 nail salon workers will accompany their parents to the
6 workplace and may be exposed over the course of a work shift
7 or workweek. Children are more sensitive to exposures and
8 therefore represent a sensitive subpopulation of concern as
9 well.

10 So, exposure to toluene is affected by a number of
11 factors including the route of exposure, whether it is
12 inhalation of indoor air, dermal exposure or accidental
13 ingestion, the number of nail products used per day, the
14 toluene concentration in the nail products used, the proper
15 use or availability of personal protective equipment. In
16 this illustration, it might be best if our example were
17 wearing gloves, for example. The size of the room, the
18 room's ventilation, the weather, the number of hours or days
19 worked per week and the number of clients serviced per day.

20 One study showed that the indoor air concentration
21 of toluene in nail salons was positively correlated to the
22 number of clients served in a given day. Meaning that as
23 the number of clients increased, the indoor air
24 concentration of toluene also increased.

25 Here is a figure presenting academic studies that

1 have actively investigated the presence of toluene in indoor
2 air at nail salons as an indicator of potential exposure to
3 occupants. The maximum levels shown represent the upper
4 ends of the concentrations detected in the indoor air. The
5 horizontal line represents the previously describe OEHHA
6 exposure level of 300 $\mu\text{g}/\text{m}^3$, the threshold level at which no
7 adverse impacts are anticipated over a lifetime of exposure.

8 The first bar in this figure represents a study
9 that detected toluene in six out of eight Los Angeles area
10 nail salons over a four-hour duration. The second and third
11 bars come from a study where toluene was investigated in 30
12 nail salons throughout California. The second bar shows the
13 amount of toluene that was detected in the indoor air while
14 the third bar represents toluene that was detected in the
15 breathing zone of nail salon workers. The last two bars
16 represent additional studies that also detected toluene in
17 excess of the OEHHA exposure level.

18 I would also like to point out that there are
19 additional studies that have detected toluene in nail
20 salons. And that all references, studies and information
21 provided in this presentation are readily available in our
22 toluene profile.

23 So once again, our current phase is proposing
24 toluene in nail products for prioritization, which is the
25 primary purpose of our talk today. But our next broad step

1 is to ask manufacturers to perform Alternatives Analysis
2 where the full evaluation of potential safer alternatives
3 will take place. DTSC has summarized some readily available
4 information on the alternatives to toluene used in nail
5 products as they pertain to their functional use and their
6 associated hazard traits but has made no determination about
7 their safety relative to toluene. By no means is this a
8 complete or necessarily accurate list, rather a starting
9 point for manufacturers and their evaluation of alternatives
10 with respect to function, hazard and exposure.

11 In summary, the program has met the two
12 requirements in proposing a Priority Product. First, that
13 there is potential for exposure to the Candidate Chemical,
14 in this case toluene, from nail coatings and thinners.
15 Second, that there is potential for toluene exposure from
16 these products to contribute to or cause significant or
17 widespread impacts.

18 Regarding exposure, evidence has been presented
19 that toluene is in nail coatings and thinners, and that it
20 has the capability to volatilize into the indoor air. This
21 is supported by studies that have measured toluene in the
22 indoor air of nail salons.

23 Regarding the second requirement to cause or
24 contribute to significant or widespread adverse impacts,
25 evidence has been presented that shows toluene's hazard

1 traits have been well established according to the
2 scientific literature and authoritative bodies. And that
3 nail salon workers, and their child or fetus, represent a
4 sensitive subpopulation with respect to toluene inhalation
5 exposure.

6 This concludes the portion of the presentation
7 dedicated to the proposed prioritization of toluene in nail
8 products. And I would now like to take the opportunity to
9 provide the audience with an overview of our other efforts
10 related to nail products and salons in California.

11 Here is a summary of the other nail-related topics
12 that are we are pursuing as a program. We are actively
13 researching a number of other chemicals that may potentially
14 be in nail products and capable of adverse impacts. We have
15 been working in collaboration with the Healthy Nail Salon
16 Recognition Program in the creation of a statewide guidance.
17 We are initiating a nail products study that is
18 investigating chemical presence in nail products sold for
19 use in California. And we will be conducting an information
20 or data call-in with the industry in the future in an effort
21 to address data gaps and uncertainty concerning our research
22 efforts.

23 Here is a list of other chemicals in nail products
24 that have been actively researched and evaluated since the
25 culmination of our previous workshop approximately two years

1 ago.

2 First, let's start with formaldehyde.

3 Formaldehyde is a volatile chemical with clearly established
4 hazard traits. It is a carcinogen, liver toxicant and
5 respiratory irritant. It is used in nail hardeners to
6 strengthen nails and is allowable by the Food & Drug
7 Administration in nail hardeners at concentrations less than
8 5 percent.

9 Formaldehyde is widespread in the environment with
10 many ambient sources such as old building materials. This
11 complicates study design and indoor air measurements as
12 comparable detections of formaldehyde are often found in
13 control samples. We are not recommending formaldehyde in
14 nail hardeners for prioritization at this time, but we are
15 following this active area of research with the intention to
16 gather additional data as new models of indoor inhalation
17 exposure are developed.

18 The next is dibutyl phthalate, a reproductive and
19 developmental toxicant that is used in nail polish as a
20 plasticizer. From what we have learned it has been mostly
21 phased out of nail products in favor of other alternatives.
22 The Mintel Database, which is a database that provides
23 information on products introduced to the market that
24 contain a particular chemical, identified no new polishes
25 containing DBP since 2012. And as a result we are not

1 recommending it for prioritization at this time. We are
2 still actively investigating its presence in products by
3 following relevant marketing databases as well as our own
4 planned sampling study.

5 Methyl methacrylate is a respiratory and dermal
6 toxicant that is used in acrylic nails, polish and gel
7 products. The Food & Drug Administration and the California
8 Board of Barbering and Cosmetology prohibit the use of MMA-
9 containing nail products in salons. In spite of this, MMA
10 has been detected in the indoor air of salons.

11 It is also allowable for sale in the retail market
12 for consumer use. We are currently researching this
13 chemical and its products and plan to take the appropriate
14 action once we collect more information.

15 Triphenyl phosphate is a suspected developmental
16 toxicant, endocrine disruptor and obesogen. It is only
17 listed by one authoritative source according to the Safer
18 Consumer Products Candidate Chemical Database, which is the
19 California Biomonitoring List. This points to a significant
20 amount of uncertainty regarding its hazard traits and its
21 potential to contribute to or cause adverse impacts. It is
22 widely used in nail polish as a plasticizer and is a known
23 hazard to aquatic organisms. But it is not persistent in
24 the environment and is present at much lower concentrations
25 than those observed to cause impacts to said organisms.

1 We are currently still following this emerging
2 active area of research with new studies that are coming out
3 regularly and with some large-scale studies planned for the
4 future in different sectors of academia.

5 Methyl ethyl ketone is a neurological, respiratory
6 and developmental toxicant. Adverse impacts resulting from
7 exposure to MEK have been observed only under very high dose
8 exposure scenarios, such as pure 100 percent MEK exposure or
9 cases involving non-salon occupational exposures.

10 It is used in nail polish and thinners, but the
11 Mintel Database shows that only 1 percent of nail products
12 from 2008 to 2017 contained MEK. There are a few studies
13 that have investigated the presence of MEK in indoor air of
14 nail salons in the United States and all detections were
15 well below risk-based regulatory thresholds.

16 As a result MEK is not recommended for
17 prioritization at this time due to insufficient evidence
18 that it can cause or contribute to adverse impacts based on
19 existing exposure and hazard data. We will continue to
20 monitor the continuing use of it in products and any
21 potential increases in exposure.

22 N-Methylpyrrolidone or NMP is a carcinogen,
23 reproductive and developmental toxicant. It was primarily
24 used in polish removers but has been phased out in the
25 European Union. Also, the Mintel Database shows only one

1 NMP-containing nail product in the last five years.
2 However, a recent study by the Food & Drug Administration
3 showed NMP in base coats, gels and thinners at low
4 concentrations. Based on this study and other
5 uncertainties, we plan on continuing additional research to
6 determine its potential presence in other nail products.

7 In addition to those chemicals just described, we
8 are also investigating and researching the following
9 chemicals in nail products due to their high frequency of
10 use, the fact that they are all on our Candidate Chemical
11 List, or in the case of diethylhexyl phthalate was detected
12 in a recent Harvard study that sampled nail products.

13 Along with these research efforts, the Department
14 has also been involved with the creation of a statewide
15 guidance for the Healthy Nail Salon Recognition Program,
16 pursuant to Assembly Bill 2125, in 2018. This guidance is
17 intended for local government agencies in California that
18 create voluntary healthy nail salon recognition programs
19 under their jurisdiction. It was established to prevent,
20 minimize or reduce nail salon workers and their customers'
21 exposure to toxic chemicals in nail products.

22 And even if one is not involved in the program,
23 the guidance can serve as a source of information and best
24 practices to any interested parties. Included here is a
25 hyperlink to the guidance.

1 DTSC has also designed a laboratory study
2 investigating the presence and concentrations of Candidate
3 Chemicals and other chemicals of interest in retail and
4 professional use nail products. This study is a follow-up
5 to DTSC's 2012 nail product study that evaluated whether
6 ingredients on labels of nail products were misreported and
7 aims to support the identification of Priority Products and
8 the improved characterization of chemical ingredients in
9 nail products.

10 This study really highlights DTSC's continued
11 commitment to nail product safety that began over seven
12 years ago and continues to evolve through stakeholder
13 engagement and active research as we move into the future.

14 Also planned is a program-initiated data or
15 information call-in. The Safer Consumer Products
16 Regulations give the Department authority to conduct an
17 information call-in, which applies to all manufacturers,
18 importers, assemblers and retailers of a specific chemical
19 or product or group of chemicals or products.

20 The data call-in is a tool that we plan to
21 implement moving forward with the intention to fill data
22 gaps related to nail products and to improve our
23 understanding of nail chemical product combinations and to
24 reduce the research and lag time of our efforts. The data
25 call-in truly is another tool at our disposal to help us in

1 engaging stakeholders to obtain the information from the
2 experts in the nail product profession.

3 So the next steps for the program are summarized
4 here on this slide. We hope to actively solicit public
5 comments on the Toluene Profile. The profile is currently
6 on the CalSAFER website and the 30-day public comment period
7 is now open. We hope to receive comments before it close on
8 April 1st, 2019.

9 We also plan to continue researching chemicals of
10 interest in nail products. We are preparing for our
11 analytical lab study that is currently under way, as well as
12 the information call-in in the future.

13 DTSC is soliciting comments on the toluene in nail
14 products profile and has some questions seeking input from
15 stakeholders. We ask that you please visit the CalSAFER
16 website to provide comments and address these questions.

17 Thank you for your time and attention. I would
18 like to now open the floor and Webcast attendees to any
19 questions or comments.

20 MR. PALMER: Thank you, Eric

21 Okay. I think we have microphones for our
22 audience here in the room, so if you raise your hand we'll
23 get a microphone to you, so you can ask your question.

24 MS. PORTER: (Off mic: indiscernible)

25 MR. PALMER: This section is really focused on

1 getting clarifying questions or questions for Eric on what
2 he's presented. We do have a more formal public comment
3 period if you want to give us a comment, but this is a time
4 for you to ask questions about what Eric presented.

5 MS. PORTER: Thank you. This is, I'm Catherine
6 Porter with the California Healthy Nail Salon Collaborative.
7 We're the organization that's been very involved with Karl
8 Palmer and DTSC around nail products. And we're co-sponsors
9 of AB 2125.

10 I have a couple of questions, one having to do
11 with the scope and the other having to do with the issue of
12 alternatives. My question about scope is you talked about
13 polish or nail coverings, and you talked about thinners, but
14 I think this names nail products generally. So will this
15 rule apply to say for example artificial nails and other
16 nail products like that? So that's one question having to
17 do with scope.

18 The other issue has to do with alternatives and
19 you're mentioning methyl ethyl ketone and that it's not a
20 priority at this time for DTSC. So I'm a little concerned
21 that there is potential for industry to substitute out
22 toluene or substitute out -- use MEK, methyl ethyl ketone,
23 instead of toluene.

24 We have concerns about methyl ethyl ketone. Both
25 toluene and methyl ethyl ketone, not only in potentially

1 being ingredients within nail polishes, are actually sold as
2 freestanding chemical to use as thinners. And so I would
3 hope that industry does not have the opportunity to replace
4 toluene, for example, with methyl ethyl ketone or any other
5 chemical that is on the Candidate Chemicals List. I suppose
6 that's more a comment than a question, but if you could
7 clarify the alternatives issue and the scope question.

8 MR. PALMER: Eric, can you maybe pull back your
9 slide that has the scope of the product definition?

10 Okay. So, and chime in anyone on the team, if I
11 get this wrong. But essentially we define what we call nail
12 coatings and the bullets on this slide show the subset of
13 specific product types that meet that definition. So if
14 there's something that's not on that list that you think
15 should be, that there's evidence that it contains toluene
16 and you think it should be, that's the kind of comment we
17 would appreciate you giving us. And the supporting
18 documentation that shows why that is a concern.

19 But that's the scope of it right there. I'm not
20 sure if you have a follow-up question.

21 DR. SCIULLO: That was in the next one. The
22 thinners are on the next one.

23 MR. PALMER: Yeah, in the next page, the next
24 slide, highlights that thinners are a different product.

25 DR. SCIULLO: We're lumping them under nail

1 products.

2 MR. PALMER: And to your second question, a couple
3 of things. One, that what we identify as a priority
4 product, we will subsequently once we finalize this process
5 we'll go through rulemaking to adopt the formal Priority
6 Product listing. And then manufacturers who sell into
7 California that product specifically have to go through an
8 Alternatives Analysis process.

9 During that process, the manufacturers will tell
10 us what they're going to do about the presence of toluene
11 and what alternatives they're going to consider. So your
12 concern about MEK being a possibility, the manufacturer
13 would be required to highlight that that's a possibility
14 that they were evaluating. And if they chose to move that
15 they would have to document why they think that's a safer
16 alternative, at which case then we would evaluate it,
17 because we have the opportunity once the AAs are completed
18 to say, "Yes, that works," or "No, that's not adequate."

19 MS. PORTER: I guess it feels like at this point
20 and time you're implicitly saying that MEK is safer than
21 toluene. That's what I'm getting in the implication, so
22 that's concerning that I'm kind of hearing that.

23 And the other issue is if we were to say we think
24 you should clarify that artificial nails should be in this
25 group we, the Collaborative, as a small nonprofit

1 organization, are even in a worse-off position to know about
2 what chemical are in products than say a state agency like
3 DTSC. So I don't know that we would be able to also
4 document that we know for sure toluene is in artificial nail
5 products. We would hope that that would be part of the work
6 of DTSC. Thanks.

7 MR. PALMER: Great, thank you. Let me address
8 your earlier point on MEK is that we're not saying MEK is
9 safer than toluene. That's not -- we're not making that
10 determination. I think primarily we didn't find evidence
11 that MEK is being used in nail products and not to say that
12 it couldn't be as an alternative. And I also want to
13 highlight that as Eric highlighted we look at the
14 information that we have available and a lot of that is with
15 a different framework. It's of a risk-based framework, risk
16 analysis. So a lot of the data is in that form.

17 That doesn't necessarily translate to say that
18 just because a risk assessment found that it wasn't a
19 problem, that doesn't preclude us from still looking at it
20 and we still do. But we take all of those factors into
21 account. It's use or lack of use. It's the data we have
22 supporting it is a problem or a potential problem or not.
23 So we're not making that determination that MEK is a safe
24 alternative.

25 MS. PORTER: Okay.

1 MR. MYERS: Hi, good morning. My name is Tom
2 Myers and I am with the Personal Care Products Council.
3 We're a trade association and we represent a lot of cosmetic
4 companies. And thank you, by the way, for your
5 presentation.

6 I had a couple of questions and it's really around
7 there was a lot of different references to different
8 regulatory levels that have been set already with regard to
9 exposure endpoints. You mentioned for example, the Prop 65
10 MADL, the California MCL, the chronic exposure level, the
11 REL from OEHHA. Are these levels going to be incorporated
12 in any way or said as part like if you're -- will they be
13 used to inform the AAT for example, in the regulation? Does
14 that make sense, the question?

15 MR. ALGAZI: Thanks, Tom. We're not at this time
16 proposing an AAT, so we're citing those levels -- oh, sorry.
17 In the regulations one of the things that we can do when we
18 adopt a Priority Product Listing is to specify an
19 Alternatives Analysis Threshold. Essentially products that
20 contain the Chemical of Concern below that concentration
21 would not be subject to the requirements of Alternatives
22 Analysis. We're not proposing to do that at this time.

23 We're just citing the exceedance of, specifically,
24 the REL as documentation that there is potential for
25 exposure that could contribute to or cause significant or

1 widespread adverse impact. At this time though we're not
2 considering an AAT.

3 MR. PALMER: Do we have any questions from online?

4 Okay. Well, seeing no questions in the room or we
5 haven't had any emailed to us, we'll move on to our formal
6 public comment period. And at this point if you would like
7 to make a comment, hopefully you filled out a form and
8 submitted that. Do we have those?

9 I see some forms in the audience being filled out,
10 so if you'd bring those forward and we'll address them in
11 the order we get them. Oh, you've got -- Zack has them?

12 MS. PORTER: Catherine Porter again with the
13 California Healthy Nail Salon Collaborative. First, I want
14 to on behalf of the Collaborative really thank DTSC for its
15 long history of looking at nail products for this community
16 that's exposed as it was indicated in the presentation, many
17 hours a day, many days a week, to a whole cocktail of
18 potentially harmful chemicals. As it was also said, a lot
19 of the women that work in this industry, particularly in
20 California are Vietnamese. And many of them are not native
21 English speakers, so language often becomes a barrier. So
22 we really applaud all the work that DTSC has done and really
23 value our relationship with the agency.

24 I do want to reiterate though what we said in our
25 March 2018 written comment, which is that we really

1 encourage the Safer Consumer Products Program to take a
2 broader view of when it looks at potential chemicals to
3 target. Instead of one chemical at a time we really urge a
4 broader look at chemical groups based on function, so for
5 instance toluene could be in a group of solvents.

6 One of the concerns we have is that by targeting
7 one chemical at a time, and I don't think I'm the first
8 person that has raised this issue or the first organization,
9 is that because this process moves so slowly -- and not to
10 bring fault for the fact that it moves slowly -- but it's a
11 long iterative process. We're concerned that at this point
12 and time manufacturers could move out toluene. And by the
13 time there is a formal chemical product named toluene will
14 be out, but potentially replaced with for instance methyl
15 ethyl ketone, which I raised concerns about earlier.

16 So we would encourage a broader approach. We also
17 really applaud that you're going to be looking at further
18 research around methyl methacrylate. The issue of
19 artificial nails is huge in the nail salon industry. As you
20 all probably know artificial nails are sort of the bread and
21 butter of many of these nail salons. So they are loathe to
22 pull back on offering those services. So looking more
23 closely at those products used in artificial nails would be
24 greatly appreciated.

25 And again we think you very much, but good job,

1 but go broader. Thanks.

2 MR. PALMER: Thank you, Catherine.

3 Yeah, go ahead. Please introduce yourself.

4 MS. JOHNSON: Okay. My name's Paul Johnson. I
5 work at the California Department of Public Health in the
6 Safe Cosmetics Program. And I just wanted to express my
7 support for focusing on toluene. And also reiterate your
8 additional concerns for the other chemicals that you
9 mentioned including formaldehyde and dibutyl phthalate and
10 methyl ethyl ketone.

11 And as Eric cited in his presentation, our
12 database that collects information from manufacturers of
13 cosmetics if they're using chemicals that are carcinogens or
14 reproductive or developmental toxicants, they have to report
15 in to our database. And as Eric cited, we do have reports
16 of toluene in 53 products and we also have reports of
17 formaldehyde and dibutyl phthalate.

18 And I also wanted to mention that we did a data
19 call-in to manufacturers and we've been reviewing over 2,000
20 formulations of nail products. And so of those we found the
21 presence of toluene in only four products, but I should also
22 say that even though it's over 2,000 formulations, it was
23 only from 7 different companies. So a lot more can be done.
24 You know there are so many products on the market, so it's
25 really a daunting task actually.

1 So toluene was in four products. We did find
2 methyl ethyl ketone in six products looking at those
3 formulations. We did not find dibutyl phthalate. We did
4 find formaldehyde in eight products. We're looking at the
5 same chemicals, because I also looked at triphenyl phosphate
6 and we found that in 476 formulations.

7 Another one that I don't think that you mentioned
8 is not formaldehyde alone, but it's tosylamide/formaldehyde
9 resin. And we found that in 299 of the formulations that we
10 looked at and this is a concern, because
11 tosylamide/formaldehyde resin emits formaldehyde. And we
12 have also done a lab testing for VOC emissions in a few of
13 the products, not nearly all 2,000. But it's just in a few
14 and so we have lab-confirmed data that products containing
15 tosylamide/formaldehyde resin actually do emit formaldehyde.

16 But that's not the only chemical that emits
17 formaldehyde, because there's also other products that did
18 not contain that ingredient that we found are also emitting
19 formaldehyde. And this was products, we found a couple of
20 them that are marketed as formaldehyde-free that are also
21 emitting formaldehyde. And so that could be from that
22 formaldehyde resin or other chemicals, not only the resin.

23 And then I also wanted to mention that, so there's
24 various forms -- I'm sure you're seeing this too of
25 acrylates in products. And so out of the over 2,000

1 formulations that we've been looking at over 1,000 of them
2 contain one or more different types of acrylates. And some
3 are more toxic than others, but it's really hard to evaluate
4 all the different acrylates, because there's just so many of
5 them that are coming in to the market. But I think that
6 this could be considered and some types of acrylate could be
7 considered as alternatives to toluene and other solvents
8 too. Because as gel products come into the market that are
9 not solvent-based, they are acrylate-based, so that could be
10 considered as an alternative to a solvent-based product.

11 So more testing, more research is needed and I'm
12 glad to hear that you're planning this follow-up to your
13 other study to test more products for chemicals. Thank you.

14 MR. PALMER: Thank you, Paula.

15 MS. VAN VLIET: Thank you, Lisette van Vliet,
16 Breast Cancer Prevention Partners. So very briefly we're
17 very glad to see that you're looking at nail products.
18 We're very encouraged by the way the draft profile is
19 shaping up. We have a couple of specific comments, which is
20 that endocrine disruption didn't seem to get a great deal of
21 attention in the profile.

22 And I'd like to note that a more recent study in
23 environmental health perspectives in 2016, which was the
24 European Meta-Analysis found that occupational exposure to
25 endocrine-disrupting chemicals including toluene was

1 associated with an increased risk of low birth-weight. So
2 that confirms what you've already found, but adds yet
3 another very large cohort study, which was 133,000 mother
4 and baby pairs for this increased risk.

5 And yeah, just to also reemphasize generally that
6 toluene by itself or if combined with other organic solvents
7 can promote tumor growth and formation. So it's a concern
8 for breast cancer and even though that might not be the
9 highest hazard that's come under attention, we know that
10 rats that are exposed to the highest concentration of a mix
11 of organic solvents in a particular study have developed
12 mammary tumors. And that any exposure to endocrine
13 disruptors during periods of vulnerability, biological
14 vulnerability, prenatal, puberty and pregnancy, can lay the
15 groundwork for damage to breast tissue and potential further
16 development of breast cancer.

17 So we wanted to just draw your attention to that.
18 And to mention that today and we will hopefully be able to
19 provide written comments. And I have a few other remarks,
20 but I can do that bilaterally. Thank you.

21 MR. PALMER: Thank you, Lisette.

22 No other comments in the room it looks like? I
23 want to make sure, we have plenty of time so we're here to
24 listen and engage.

25 We don't have any email -- oh we do have one? Oh,

1 go ahead.

2 DR. YARDIMCI: So we received a comment online
3 from Megan Kalsman from the San Francisco Department of the
4 Environment.

5 "My name is Megan Kalsman with the San Francisco
6 Department of the Environment with the City and County of
7 San Francisco. We strongly support the Safer Consumer
8 Products Program looking at chemicals in nail products since
9 we have a Healthy Nail Salon Recognition Program where we
10 help nail salons use safer products and practices.

11 "From a nail product ingredient review in 2017 of
12 traditional and gel polishes used in San Francisco salons,
13 we have seen isopropyl and butyl and ethyl acetate as a
14 replacement solvent for toluene. Toluene was not found in
15 gel polishes and was found in popular topcoats in salons.

16 "We are concerned with looking at toluene as a
17 single chemical and not taking a chemical class or
18 functional class approach in order to avoid regrettable
19 substitutions.

20 "We plan to submit written comment by April 1st."

21 MR. PALMER: Thank you, Dicle.

22 Anything else? Nothing else in the room. Okay.

23 Well, absent any other comments I'll just move right to
24 concluding remarks.

25 First, I want to thank everyone for being here and

1 for tuning in online. As you know, our actions are really
2 dependent on the quality of the information that we get.
3 And so it's really important, and I'm pleased to see today
4 that we have both industry and advocacy here today, and I'll
5 look forward to seeing your comments on our profile
6 document. And I want to give you some sense of where we go
7 from here.

8 Once we get those comments -- and I want to also
9 acknowledge our other government partners here -- CDPH,
10 thank you Paula for being here. We'll be taking that
11 information along with the information that we hope to get
12 through our Sampling and Analysis Initiative as well as the
13 information call-in to manufacturers to fill data gaps to
14 answer some of the questions you raised today to give us
15 further insight on our perspective and our proposal. And
16 once we do that we'll finalize our Priority Product profile.

17 That document then will be used as the key
18 document in our rulemaking to list the Priority Product.
19 And what happens then is we take that document and it
20 undergoes a formal external scientific peer review. It's
21 just what it says, it's external. It goes through the
22 Office of the UC President. And that will address the
23 fundamental criteria questions we have. How we documented
24 that this Priority Product meets our criteria.

25 Once that's completed we'll take into account what

1 that peer review finds and make any adjustments or changes
2 as necessary and then move formally into rulemaking. At
3 that point there'll be another opportunity for everyone to
4 comment, because there's a formal comment period on that.
5 And we'll take those into account and finalize our listing
6 regulation for the Priority Product, which at that point
7 once it becomes effective is when the manufacturers that
8 sell that specific product into California are then required
9 to notify us that that's what they do and to take one of the
10 paths available to them in terms of Alternatives Analysis.

11 So a lot going on, we're not there yet in terms of
12 action, but this is a really important time for us to hear
13 from all the stakeholders about the information they have
14 that will inform us to make good decisions moving forward.

15 Catherine, you had a question?

16 MS. PORTER: Yes, I have a quick one

17 (indiscernible)

18 MR. PALMER: Go ahead.

19 MS. PORTER: I know it's impossible to say, but do
20 you have any sense of the timeline like the sampling
21 analysis, how long you think that's going to take --

22 MR. PALMER: Sure.

23 MS. PORTER: -- and then the review by the
24 external body (indiscernible)

25 MR. PALMER: Sure. To give you some sense the

1 information and call-in process is we're developing our
2 questions now and we'll be working with our industry
3 partners to make sure that we get to the right people who
4 can answer those questions. And we anticipate their help in
5 that regard and in answering those questions. I don't have
6 a specific timeframe for when that will be done. We're
7 moving on that expeditiously.

8 Concurrently we are, as we speak, purchasing
9 various products for testing. And we have -- and that
10 effort will go into late spring and summer and then it'll
11 sort of depend on what we find in that effort, how that
12 feeds us back into our findings that we already know and new
13 things that might inform us about how we might change our
14 perspective.

15 And then to rulemaking as you know that's a
16 typically eight, ten, twelve-month process and so we hope to
17 get into that process certainly this year if possible. But
18 I alluded in my opening remarks to sort of the trajectory of
19 our work on nails and it coincides with our trajectory for
20 the whole program. And importantly as you know, the first
21 three Priority Products that we announced and listed, it
22 took us about five years to get all of those adopted in
23 regulation. And so a considerable amount of time and
24 effort, but these were the first ones that we had ever done.

25 And so internally and externally we've all learned

1 about how our process works.

2 We've developed processes, checks and balances, to
3 make sure we're making good decisions. I'm very pleased and
4 I'm thankful to my staff who've done a great job in building
5 this process that now that process will accelerate. Right
6 now we have four potential Priority Products in the queue:
7 this one, as well as detergents with nonylphenol
8 ethoxylates, carpets and rugs with perfluorinated alkyl
9 substances, paint and graffiti removers with NMP, and I said
10 laundry detergents?

11 UNIDENTIFIED SPEAKER: (Indiscernible.)

12 MR. PALMER: Oh, and so those three and then this
13 one, so that's four. And we're actively pursuing this
14 calendar year and so there's going to be a lot going on.

15 But the caveat is that this information collection
16 process is really important. We may find that we missed,
17 something or we may find some additional work that we need
18 to do. We're not just going to push it through based on
19 what we know today, so that just speaks to the importance of
20 engagement; all of your engagement, to give us good
21 information.

22 Andre, do you want to add anything?

23 MR. ALGAZI: I was just going to process-wise
24 after the close of this comment period, and the 1st of
25 April, the team will be reviewing, digesting all the input

1 that we receive. And then deciding what changes if any we
2 need to make to the profile before it goes to the peer
3 review. So essentially we'll take into consideration the
4 input we get from all of you, refine what we've written.
5 And then that is the version that goes to the external
6 reviewers and then they typically it's a couple of few
7 months between initiating the requests and getting results;
8 four months, three.

9 MR. PALMER: Three to four months, that process we
10 don't really control, but it's been pretty easy.

11 MR. ALGAZI: So if you just kind of do the
12 arithmetic it's later in the year before we get to
13 rulemaking.

14 MR. PALMER: Right. Thank you, Andre.

15 DR. SCIULLO: I'd also like to say that the
16 recommendations that I gave that were given regarding all
17 the other chemicals that were investigated, there are soft
18 recommendations and are subject to change based on any new
19 information that is presented to us or that we uncover along
20 the way.

21 MR. PALMER: Yeah. Thank you, Eric.

22 So again I do want to take a moment to thank all
23 my staff who have worked hard to get us to where we are
24 today. And on this profile and this process today we're
25 really blessed to have really outstanding staff who are

1 really committed. And it's a group of scientists and
2 engineers who are curious, mission-driven, and happy to
3 engage with all of you on the substance of your concerns and
4 ours. So please take the opportunity to follow up with us.
5 And again thank you all. We'll look forward to the next
6 step of this process.

7 And with that we'll close today's workshop and a
8 safe journey back to your homes. Thank you.

9 10:05:57 AM OFF THE RECORD OFF THE RECORD

10 (Thereupon, the Workshop was adjourned at 10:05 a.m.)

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