

**Transcript of July 25, 2025 Public Hearing on
Proposed Amendments to 301 CMR 41: TURA Toxic or Hazardous Substance List**

This transcript is based on Zoom's automated closed captioning service. Software audio interpretation errors have been corrected wherever possible based on the contemporaneous notes of TURA Program staff.

Tiffany Skogstrom:

Welcome, everyone. My name is Tiffany Skogstrom, and I am the TURA Administrative Council Executive Director. Thank you for joining us today for the public hearing on the proposed amendments to the Toxics or Hazardous Substance list, 301 CMR. 41, please note that this meeting is being conducted remotely. Next slide, Caredwen.

Today's hearing is available in English, Spanish, Portuguese, Mandarin, Chinese, Haitian Creole, Vietnamese, and American Sign Language. To access one of these languages, click on the interpretation button that will appear as a globe icon at the bottom of your screen shortly, and select the appropriate language. At this time, the FOX team will explain how to access each interpretation service. [Verbal instructions provided in each interpreted languages]

So, welcome again, everyone, and thank you for joining us today for the public hearing on the proposed amendments to the Toxic or Hazardous Substance list 301 CMR41. Please note that this meeting is being conducted remotely.

This meeting will not be recorded; however, it is being transcribed to accommodate members and interested parties who are not able to attend today's event, and also for public notice or public hearing purposes of knowing what you're saying today.

Each of you will have 3 minutes to speak. If you run over that designated time slot, you'll be able to finish after other people have spoken. You'll be asked by Caredwen Foley to ask to speak by raising your hand, which is at the bottom of the screen, which is the raise hand function.

And you'll be recognized by Caredwen Foley. And [she] will notify you if you're getting close to running over the time of that 3 minutes slot. And again, if you do run over that 3 minutes, you'll be given an opportunity after other people have spoken. Next slide, please.

These proposed regulations would amend the Toxics Use Reduction Act. List of toxic or hazardous substances to include a new substance category of the didecyl dimethyl ammonium chloride, or DDAC, and the alkyl dimethylbenzyl ammonium chloride, ADBAC, subgroups of quaternary ammonium compounds. The TURA Administrative Council voted to issue this draft rule on August 10th, 2023. The purpose of today's hearing is only for us to receive comments from attendees. If you have procedural questions about the regulatory process, please submit those via email to Tiffany Skogstrom at the email address listed on the slide.

Here's how you make a comment. Use the Zoom function to raise your hand for comments or questions. To access the raise hand button function, click participants at the bottom of your screen, and then click the raise hand button that appears under the list of participants. This will notify the host that you have a question or a comment.

Please start by raising your hand now, and we will call on you in order.

Thank you.

Caredwen Foley:

I see a raised hand from Nicholas Georges, who I'm going to... Okay. Uh, Nicholas, please go ahead.

Nicholas Georges (HCPA):

All right, thank you, and just confirm you can hear me?

Caredwen Foley:

Yes, we can hear you.

Tiffany Skogstrom:

Yes.

Nicholas Georges (HCPA):

Great. Good afternoon, my name is Nicholas Georges, and I'm the Executive Director of Ignite Solutions, the consortium management program within the household and Commercial Products Association. I am here today representing the ADBAC and DDAC issue steering committees. These consortiums are science-based task forces administered by Ignite Solutions and were formed to conduct studies and technical assessments required by the U.S. EPA for federal registration and related risk assessment activities for the ADBAC and DDAC quaternary ammonium compounds, or quats. Uh, and

more detailed comments will be submitted from these groups by the public comment period deadline.

ADBAC and DDAC are critically important public health tools used to prevent and control the spread of pathogens associated with many serious public health diseases, uh, in environments where we live, work, learn, and play. ADBAC and DDAC have been extensively studied for over 30 years with regards to safety and toxicity, environmental effects, and efficacy and performance. There is a robust data set from studies which have been conducted to internationally recognized quality standards and technical guidelines, and which substantiate their safe use. This includes numerous studies that have shown no specific systematic toxicity, and not, uh, no evidence of mutagenicity, sensitization, development, and reproductive toxicity, endocrine disruption or carcinogenicity. Environmental studies confirm that ADBAC and DDAC are not [inaudible] are effectively removed during wastewater treatment and are not persistent. These studies have been submitted to agencies around the world that regulate ADBAC and DDAC products, and summaries of these data are available from regulatory databases. This extensive dataset and the expert conclusions from the regulatory agencies in their evaluation of these data that recognize ADBAC and DDEC as safe must be taken into consideration. The reality is that these compounds have low toxicity when used as directed because they prevent and control growth and spread of bacteria, viruses.

The mode of action of the substance is point-of-contact irritation, disrupting the membranes of bacteria in the outer coatings of viruses. ADBAC and DDEC are, uh, efficacious at low concentrations such as less than 1%, within final products that consumers and workers use to remain safe and do not pose any harm to the end user when filing label directions. It should be noted that the alternatives identified in the TURA policy analysis draft June 2023 also present inherent hazards, including respiratory or dermal irritation or corrosion, flammability, and or respiratory or dermal sensitization. Further, these compounds do not have the same efficacy and may be found in finished products at higher concentrations. With that said, the alternative chemistries identified are also safe when the end user follows label directions.

In summary, ADBAC and DDAC are data-rich substances with long history of use and are widely considered safe when used in accordance with label directions. These substances serve an important role in maintaining hygienic conditions, including where it is critically important, such as in food handling establishment and healthcare settings. Limiting access to these [inaudible] could lead to negative impacts on public health due to regrettable substitutions and or ineffective disinfection.

Given the wealth of data to support the safety of ADBAC and DDAC, I am requesting on behalf of the ADBAC and DDAC Issues Steering Committees that the proposal to list ADBAC and DDAC subgroups not proceed forward with adding ADBAC and DDAC to the TURA list. Thank you for your time and consideration.

Caredwen Foley:

Thank you very much. Our next attendee with a hand raised is Hannah Alleman.

Hannah Alleman:

Hello, good afternoon, just testing that you can hear me. Okay. Hello, I am Hannah Alleman, Director of Chemical Products and Technology with the American Chemistry Council's Center for Biocide Chemistries.

Caredwen Foley:

We can hear you, thank you.

Hannah Alleman:

A TURA listing for quats is not appropriate. TURA imposes fees on companies that use high quantities of TURA-listed chemicals, a designation designed to encourage businesses to use less of those TURA-listed chemicals. In the case of quats, many times, um, appropriate alternatives do not exist that have the same efficacy and low environmental or human health risks. Quats provide unique and important benefits. They can be used in many disinfectant and sanitizing products, killing public health pathogens that could infect Massachusetts residents at hospitals, food establishments, food processing facilities, and manufacturing facilities, and in other public spaces and homes. They're widely used in many products we use every day, including used as preservatives or industrial biocides. Providing important functions in leather processing, water treatment, including cooling towers, anti-fouling paints, and etc.

Listing under TURA will not discourage the use of ADBAC and DDAC, nor does it address issues of improper use of these chemicals. To address issues of pesticide misuse or overuse, training is needed for pesticide users. The use of pesticide misuse is not unique to quats, and therefore the replacement of quats with another antimicrobial pesticide will not address the core training needs. In the case of registered pesticides, there are required PPE and label mitigation depending on the risks posed by each of the pesticides, such as quats.

The Science Advisory Board did not examine whether alternatives are available for any uses other than disinfectant uses, nor did the Science Advisory Board systematically examine whether the identified alternative products can provide a safe and efficacious replacement

for quats for their full scope of approved uses. If quats were to be eliminated, including those uses in food service, hospital, institutional, or industrial applications, equivalent alternatives are not available or suitable for particular uses and many disinfectant uses. Quats are among the only products with the safety profile that can be used in low doses where there may be food contact, and are among the only products to kill critical pathogens in hospital settings. Quats are registered as an antimicrobial pesticide by the U.S. EPA, which requires extensive data from registrants, and conducts risk assessments and requires risk mitigation measures to ensure that pesticides are used in a manner that does not pose an unreasonable risk to human health and the environment. Quats are registered by state agencies, which also determine whether [quats are] on the market. Upon reviewing the pesticide data.

More comments will be provided by The Center for Biocide Chemistry by the written comment date. Thank you for consideration of my comments.

Caredwen Foley:

Thank you very much. This time, I'll recognize Katherine Robertson.

Katherine Robertson:

Hi, my name is Katherine Robertson, and I am Executive Director of the Massachusetts Chemistry and Technology Alliance, an organization representing the manufacturers, users and distributors of chemistry in Massachusetts. First, I want to thank MassDEP for granting the extension to the public comment period until September 12th. MCTA has been commenting on the listing of DDAC and ADBAC since TURI first proposed listing these chemistries back in 2020 when the use of quat-containing products skyrocketed because its effectiveness preventing the spread of COVID-19.

MCTA strongly believes that listing these substances is not supported by sound science and does not advance TURA's primary mission of incentivizing businesses to reduce their use of toxic and hazardous substances. The primary target of this listing would be chemical compounders and distributors, who are responding to customer specifications and do not have the option of substituting alternatives. Compounders and distributors are not the deciders. They only respond to customer demand. In fact, according to TURI's policy document, there are only between 5 and 10 companies in Massachusetts who would be subject to the financial and regulatory burden imposed by this listing. It is these companies who will bear the financial and regulatory burden from this rule. In addition, only Massachusetts companies will be required to pay a fee, file an annual report, and go through a planning process every two years to search for a way to reduce the use of a chemical that they cannot reduce because the customer specifies it. A TURA listing adds

thousands of dollars to the cost of distributing a product – a number that increases significantly if these company are not already TURA filers. This puts Massachusetts businesses at a competitive disadvantage with abutting states that do not have a TURA program.

It is also important to note that quat-containing products that reach market shelves, janitorial supply closets, and households are... have highly diluted, and do not pose a risk to human health and the environment for large crucial users such as hospitals, nursing homes, food service providers, schools, and public buildings, which is the majority of the users. Listing DDAC and ADBAC will have no impact on these entities, because they do not trigger TURA thresholds and they are not subject to the TURA law. These industries rely on a proven product to protect vulnerable populations because the risk of failing is too great. A TURA listing places a scarlet letter of sorts on this valuable and necessary chemical that is the most effective agent on the market in preventing life-threatening diseases such as E. Coli and listeria. Like the Federal Office of Health and Human Services, which [inaudible] the safety and efficacy of vaccines. A TURA listing could confuse customers and lead them to use inappropriate substitutes that have not been proven as safe, as effective as DDAC and ADBAC in stopping deadly diseases. As a result, we urge...

Caredwen Foley:

It's been... it's been 3 minutes, I'm so sorry. I need to allow other members to speak, but you're welcome to complete your comments after they do, if you still have.

Katherine Robertson:

Okay.

Caredwen Foley:

If you saw more to share. Thank you very much. Okay, um, I'd now like to recognize, uh, attendee C. Carter.

Katherine Robertson:

I was just saying bye. Thank you.

Craig Carter:

Just to confirm you can hear me?

Caredwen Foley:

We can hear you, yes. Could you... would you be willing to state your full name, please?

Craig Carter:

I'm sorry, my name is Craig Carter, and I'm the Professional Hygiene Marketing Director at Arxada.

Caredwen Foley:

Okay.

Craig Carter:

Uh, so we are a global leader providing trusted solutions to help protect public health at and away from home. We are also one of the primary manufacturers of ADBAC and DDAC quaternary.

According to CDC's National Outbreak Reporting System, or NORS. In 2022, there were 51,000 illnesses reported in key settings, like long-term care facilities, schools, daycares, and food service establishments. Over 63% of these were due to person-to-person transmission, often involving hands and surfaces. Quat-based disinfectants and sanitizers are crucial for reducing transmission in these environments.

For example, in food safety, quats are the predominant sanitizers used for food services as mandated by the USDA and state health departments in food processing, food retail, and food service, as in all-professional and consumer applications. They're preferred because of their broad efficacy against bacteria and viruses and low concentrations, wide pH formulating range, compatibility with other raw materials and low corrosion on surfaces. If sold concentrated, once diluted, they have a very favorable toxicity profile.

Efficacy at low concentration is one of the primary factors that makes quats irreplaceable by the alternative chemistries proposed. Low concentrations enable the highly concentrated dilutable products that are used across professional applications. For example, quats deliver effective food surface sanitization at just 150 to 400 ppm. One gallon of a 10% quat concentrate can produce up to 512 gallons of sanitizer. In contrast, by example, organic acid-based food surface sanitizers need over 6 times more active ingredient for similar efficacy. And there are currently no hydrogen peroxide-based food surface sanitizers on the market. Similarly, quat disinfectant cleaners for healthcare and other public spaces are up to 4 times more concentrated than alternatives and require up to 50% less active ingredient to deliver similar efficacy.

Switching to the proposed alternate chemistries could increase environmental discharge of actives, increased packaging waste, and increased formulation and logistics costs.

Quats also protect public health at home. According to NORS, about 5% of outbreaks begin in private homes, and most retail disinfecting wipes and liquids use low levels of quats and have good safety profiles.

As you consider the full body of scientific evidence and the proven benefits quats offer for public health, as we continue to innovate to improve biocides, we stand behind quats as a safe, effective solution when used by professionals and consumers according to EPA and state-approved labels.

Thank you for your time and consideration.

Caredwen Foley:

Thank you very much. This time, I'll recognize Tom Osimitz.

Tom Osimitz:

Good afternoon, am I unmuted okay? Thank you. Apologize for the cold. Um, thanks.

Caredwen Foley:

We can continue, thank you.

Tom Osimitz:

[inaudible] to talk to you. My name is Thomas Osimitz, I'm President and Principal Toxicologist at Science Strategies, a consulting firm. Worked in the risk assessment area for a number of decades, and I'm at... here at the request of the Quat Science Group, a group that's administered by Nicholas Georges, HCPA.

Um... I want to really jump to one of the most important issues, I think, as a toxicologist, and that's the database underlying some of the assessments and some of the determinations to add to the TURA list. Nicholas mentioned that quats are unique in one way, in that their toxicity tends to be pretty much exclusively at point of contact. It doesn't cause systemic toxicity in many of the guideline studies which have been conducted. Um, we'll set the guideline studies aside for a second, because one of the areas that's often cited are the non-guideline studies, they're investigative studies. And then there's a single human study done as well. Um, I might add that my colleague Wiebke Droege and I from Science Strategies have researched, authored, and published three public peer-reviewed papers in the last three years on quats. The most recent one was just published online about a month and a half ago, and we go through the various data very critically, including the guideline studies, to take a look at what data really are useful and can stand up to scrutiny when it comes to assessing hazard, and ultimately deciding what should be on TURA. An example of this is some of the animal studies which have been cited, some of the

reproductive studies. If you look closely at those data, there's some, uh, certainly they're not in compliance with regulatory guidelines, which doesn't mean they're not useful, but there are certain deficiencies we point out that I think would, uh, most toxicologists would view as disqualifying from the standpoint of assessing or determining if there's a hazard. The other one I think that's often cited is a human study that was done, um, and published about... probably about 5 or 6 years ago now. It was from a biomonitoring study. 43 study participants, and the data have not been reproduced since then. But in looking carefully at the clinical chemistry measures they used and tried to correlate them with samples that were taken from these 43 people. There's a lot of discontinuities, and also just laboratory practices that you'd not see in a normal clinical lab. I point this out to say, when it comes to looking at the database, look beyond the guideline studies, because there are valuable studies out there, but be very careful, because when it comes to deciding what's really a hazard for humans. That scrutiny is important.

Um, I accept what the other folks are saying regarding the benefits of quats. As a toxicologist and someone interested in a hard science view of the chemistry, it's important that you go all the way back to square one. Look at the guideline studies, review the non-guideline studies, and when we do that, truly the guideline studies are determinative, and they would indicate that we would not consider this to be eligible for a TUR classification. We'll follow up with some written comments as well, but thank you for the opportunity to talk.

Caredwen Foley:

Thank you very much. I don't see any other speakers with raised hands for the moment, but, um... If anybody else would like to speak, or if any of our previous speakers would like to add to their comments, um, please feel free to raise your hand and I'll recognize you.

Tiffany Skogstrom:

I'll just say, for any people who may not have joined us earlier: This is a public hearing on the proposed amendments to the Toxic or Hazardous Substance list, 301 CMR 41. Um, and... If you'd like to make some comments... you'd have 3 minutes to speak. If you run over the designated time of slot, you'll be able to finish after other people have spoken. You'll be asked to speak by raising your hand, which is at the bottom of your screen, which is the raise hand function. Uh, and you'll be recognized by Caredwen Foley. And you'll be notified if you're getting close to running over the 3 minutes of time. And again, if you do run over those 3 minutes of time, you'll be given an opportunity after other people have spoken, so thank you for being here, and welcome. Please raise your hand if you'd like to speak.

I am just going to state again that, uh, thank you for joining us today for the public hearing on the proposed amendments to the Toxic or Hazardous Substance List, 301 CMR 41. If you'd like to speak, each of you would have 3 minutes to speak. If you run over the time designated, uh, you'll be able to finish after other people have spoken. You'll be asked to speak by raising your hand, which is at the bottom of your screen, it's the raise the hand function. You'll be recognized by Caredwen Foley. And you'll be notified if you're getting close to running over the 3 minutes of time. Again, if you do run over that 3 minutes, you'll be given an opportunity after other people have spoken. Thank you.

It's 2.50 PM, and the public hearing will be closing at 3 p.m. today, so I want to thank you for joining today, uh, for the public hearing on the proposed amendments to the Toxic or Hazardous Substance List, 301 CMR 41. If you'd like to speak, you'll have 3 minutes to speak. If you run over the designated time slot, you'll be able to finish after other people have spoken. You'll be asked to speak by raising your hand, which is at the bottom of the screen. It's the raise the hand function. You'll be recognized by Caredwen Foley. And you'll be notified if you're getting close to run over... running over that 3 minutes of time. And again, if you do run over that 3 minutes, you'll be given an opportunity after other people have spoken.

It's now, 2.59 PM, and the meeting will close at 3, so I want to say thank you for participating in our public hearing today. As a reminder, all written public comments are due by 5pm on September 12th, 2025 at the email address on the slide. So thank you very much, and we will stay here until 3, and then close at 3.