

# **Eliminating Copper from Brake Linings - Legislation Status and Industry Activities**

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# Task Force Overview

The Task Force provides an industry wide venue (original and aftermarket equipment manufacturers through tier 3 / 4 companies as well as consulting firms, governmental agencies, industry groups, educational institutions, and other interested parties) to address issues, potential legislation, awareness, etc. related to the global environmental aspects of brake components materials (i.e. primarily friction material). Currently, the most significant issue is working with state agencies that have legislation or proposing / investigating legislation directed at the environmental effects of copper (as well as asbestiform, and heavy metals) in the wear debris of brake friction materials. The Task Force supports addressing issues not only in the rulemaking process, but in the application and the enforcement phase as well. The membership covers most vehicle industry segments i.e., commercial vehicles, light trucks, passenger cars, motorcycles, golf carts, railway.

# Task Force Membership

- **OEM's (15)**
- **Foundation Brake Suppliers (18)**
- **Brake Lining Suppliers (23)**
- **Testing Companies (5)**
- **Industry Organizations (9)**
- **Academia (2)**
- **State Regulators - CA & WA (7)**
- **Consultants (4)**

**Note: One to two meetings per month**

## **Legislative Requirements – CA SB 346 & WA SB 6557**

**Effective 1/1/2014, brake friction material containing any of these constituents exceeding the noted concentrations may not be sold: Asbestiform fibers, 0.1 percent by weight; Cadmium and its compounds, 0.01 percent by weight; Chromium(VI)-salts, 0.1 percent by weight; Lead and its compounds, 0.1 percent by weight; and Mercury and its compounds, 0.1 percent by weight. A note of caution: these materials may be contaminated to other constituents – analyzing raw materials is advised.**

**Effective 1/1/2021, brake friction material exceeding 5% copper and its compounds by weight may not be sold in vehicles and aftermarket friction.**

## **Legislative Requirements – CA SB 346 & WA SB 6557 (cont.)**

**Effective 1/1/2024 (at the earliest) for WA and effective 1/1/2025 (at the earliest) for CA, brake friction material exceeding 0.5% copper and its compounds by weight may not be sold in vehicles and aftermarket friction.**

**Both states have vehicles and applications that are exempt, but they are not totally consistent.**

**Both states have “10 year inventory runoff”, but they are not consistent.**

**Both states will permit extensions, but the details have not been determined.**

## **Legislative Requirements – CA SB 346 & WA SB 6557 (cont.)**

**Both states require manufacturers of brake friction material offered for sale in either state to obtain, from an testing agency, certification of compliance; and retailers of brake friction material to ensure that they only offer for sale brake friction material certified to be in compliance.**

**California requires third party testing certification agency accredited by California Department of Toxic Substances, but Washington State allows self certification of compliance using an accredited laboratory. The process and details have not been worked out for either certification.**

## **Status of Working Out Details for Processes and Implementation of CA SB 346 & WA SB 6557**

**California: Open rulemaking option is still on the table but these decisions are on hold pending leadership appointments and overall budget concerns. Responses to industry and SAE Task Force questions posed late last year to DTSC are still in their legal staff.**

**Washington: A timeline of activities beginning May 2011 has been published by the Department of Ecology. They will begin by addressing open issues.**

## **SAE TF Action Items in Response to CA SB 346 & WA SB 6557**

**The TF has provided technical information to the regulators during the writing of the bills, through passage, and will continue through implementation.**

**Compliance Testing: Testing methodology is still TBD but both states are actively working with the SAE Brake Lining Materials Analysis Methodology Task Force, Chaired by Dr. Greg Vyletel, formed to work on this issue. Dr. Vyletel will present the status next on this morning's program.**



## **SAE TF Action Items in Response to CA SB 346 & WA SB 6557 (cont.)**

**Brake Lining Edge Code Marking Agreement: The TF has proposed a three-digit edge code that consists of a one-character "environmental code" (A=meets req's. for heavy metals and asbestiform fibers; B=meets <5.0% by weight copper; C= meets <0.5% by weight copper); and X= exempted or extension material plus a two-digit "year of manufacturer code" (11=2011, 12=2012, etc.). This code has the support of the TF members as well as industry associations e.g. MEMA. This three-digit code would be added to the existing supplier edge code at end of the two-letter friction coefficient field. This information would typically fall between the friction material company and lining formulation and a specific date code or batch code or other optional supplier information.**

## **SAE TF Action Items in Response to CA SB 346 & WA SB 6557 (Edge Code cont.)**

**The three-digit edge code draft proposal is being given to the regulators for their response as well to the other stakeholders (e.g., environmental groups, retailers, installers) through the regulators.**

**Concurrently, the proposal is being moved to the Brake Lining Standards Committee chaired by Paul Aurand to approve and to decide which standard this new edge code should be added (e.g. should it be added to J-866 {Hot/Cold Friction Standard} or create a new J-standard).**

## **SAE TF Future Action Items in Response to CA SB 346 & WA SB 6557**

**The TF will continue to provide technical expertise to questions raised by the regulators or by other stakeholders that the regulators want our input.**

**CA DTSC and WA Dept. of Ecology have stated that the TF will be called upon to provide technical assistance in future material analysis, exemption process, extension process, third party and self certification, etc.**

## **Status of Other States with Potential “Copper” Legislation**

**Oregon is to initiate a bill despite the industry’s position in our inability to support any further state copper legislation due to the passage of the California and Washington laws (as their hard deadlines to reduce copper to no more than 0.5% by weight will result in compliance for all 50 states plus US territories). The Oregon bill will have a work session on April 19. The bill will likely be considered and voted favorably out of committee at that time. Floor action will follow shortly.**

**New York and Rhode Island initiated legislation last year, but does not appear to be considered this year.**

**Alaska has had discussions, but doesn’t have any EPA issues to need legislation.**

# Thank You!

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