BILLS ANALYSIS

SB 346

SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator S. Joseph Simitian, Chairman
2009-2010 Regular Session

BILL NO: SB 346
AUTHOR: Kehoe
AMENDED: April 2, 2009
FISCAL: Yes HEARING DATE: April 20, 2009
URGENCY: No CONSULTANT: Caroll
Mortensen

SUBJECT: BRAKE PADS

SUMMARY:

Existing law:

1) Requires the Department of Toxic Substances Control (DTSC), by January 1, 2011, to adopt regulations to establish a process to identify and prioritize chemicals or chemical ingredients in consumer products that may be considered a "chemical of concern," in accordance with a review process, as specified.

2) Requires DTSC, on or before January 1, 2011, to adopt regulations to establish a process to evaluate chemicals of concern, and their potential alternatives, in consumer products in order to determine how best to limit exposure or to reduce the level of hazard posed by a chemical of concern, as specified.

3) Prohibits the manufacture, processing, and distribution in products containing certain materials found to raise health risks, including lead, polybrominated diphenyl ethers (PBDEs), and phthalates.

4) Requires the State Water Resources Control Board and the California regional water quality control boards regulate the discharge of stormwater in accordance with the federal Clean Water Act and the Porter-Cologne Water Quality Control Act.

Enclosure (3)
This bill:

1) Prohibits, after January 1, 2021, the sale of brake pads in California that contain more than 5% copper by weight.

2) Prohibits, after January 1, 2032, the sale of brake pads in California that contain more than 0.5% copper by weight.

3) Requires manufacturers of vehicles and brake pads to monitor and provide two reports to DTSC on their efforts to comply with the copper reduction mandate. The first report is due on or before January 1, 2016; the second, on or before January 1, 2018.

4) Prohibits, after January 1, 2014, the sale of brake pads in California that contain the following materials in the amounts specified:
   a) Cadmium and its compounds: 0.01 percent by weight.
   b) Chromium(VI) salts: 0.1 percent by weight.
   c) Lead and its compounds: 0.1 percent by weight.
   d) Mercury and its compounds: 0.1 percent by weight.
   e) Asbestos fibers: 0.1 percent by weight.

5) Requires, on or before January 1, 2013, DTSC to perform a base-line survey of the levels of nickel, zinc, copper and antimony in brake pads.

6) Requires, on January 1, 2013 and at least every three years thereafter, DTSC to monitor for nickel, zinc, and antimony to ensure that the levels of those constituents do not increase more than 50% above the levels established in the baseline study in #5 above.

7) Requires, if the levels for any of materials in #5 above exceed the 50% threshold established in #6 above, DTSC to take further action with other state agencies as specified to determine if there is a need to control the use of those materials.

8) Requires manufacturers of brake pads to follow the process to be adopted by DTSC regarding criteria to evaluate alternatives to copper in brake pads.

9) Requires, on January 1, 2014, all brake pad manufacturers
to obtain certification as specified to demonstrate compliance with the requirements in #4 above and include that certification on the brake pads.

10) Requires, on January 1, 2021 and until December 31, 2031, all brake pad manufacturers to obtain certification as specified as to compliance with the requirements in #1 above and include that certification on the brake pads.

11) Requires, on January 1, 2032, all brake pad manufacturers to obtain certification as specified as to compliance with the requirements in #2 above and include that certification on the brake pads.

12) Requires vehicle manufacturers and retailers of brake pads to ensure that only compliant brake pads are sold in this state.

13) Establishes a civil fine of up to $10,000 per violation of the new article.

14) Establishes DTSC as the enforcing agency for the new article and permits them to remove non-compliant brake pads from sale.

15) Requires, on January 1, 2011, DTSC to impose a fee of $1.00 per axle set of brake pads sold in this state (installed in a new car and replacement pads) and after January 1, 2015 allows DTSC to adjust the fee as necessary to fully implement the new article.

16) Requires that the fee be used to only cover specified costs related to control of copper and other materials in brake pads.

17) Allows up to 5% of the fees collection to be used for account costs of fee collection.

18) Allows funds to be allocated by DTSC to trade associations associated with brake pad sale and manufacture for purposes of outreach to their memberships.

19) Requires DTSC to consult with the State Water Resources Control Board regarding implementation of the new article and use of the fees.

COMMENTS:
1) Purpose of Bill. According the author, elevated copper levels occur in urban watersheds across California. Dissolved copper is toxic to phytoplankton (the base of the aquatic food chain). It also impairs salmon’s ability to avoid predators and deters them from returning to their home streams to spawn. Scientific studies have shown that a major source of copper in highly urbanized watersheds is material worn off vehicle brake pads. It is estimated that about one-half of the copper found in run-off is attributed to brake pads.

2) Total Maximum Daily Loads. The State Water Resources Control Board (SWRCB) has established Total Maximum Daily Loads (TMDLs) as allowable pollution limits on copper and other pollutants in several Southern California urban watersheds. Failure to comply with these TMDLs will result in serious penalties to the responsible jurisdictions. The SWRCB is working to establish these TMDLs for watersheds throughout California. The ubiquity of copper in the urban environment, and the technical difficulty and impracticality of treating stormwater to remove it, mean that compliance with copper TMDLs will not be feasible without source reduction of copper. Cost could go into the billions of dollars to remediate if source reduction measures are not taken.

3) The Brake Pad Partnership. The Brake Pad Partnership is a collaborative group of brake manufacturers, environmentalists, stormwater management entities, and regulators that originally came together to understand the impact on the environment of brake pad wear debris. Before the Partnership committed to investing significant state and private resources in technical studies, the Brake Manufacturers Council (BMC) and its members (primarily manufacturers of original equipment friction materials) agreed to introduce reformulated products if the technical studies indicated that copper in brake pads was contributing significantly to water quality impairment. The SWRCB and Caltrans together contributed close to $1 million towards paying for the subsequent research into the issue. In late 2007 the Partnership completed a series of interlinked laboratory, environmental monitoring, and environmental modeling studies that indicated that brake pads are a substantial contributor to copper in run off to the San Francisco Bay. As the technical studies’ results emerged, the Partnership shifted its focus to determining an appropriate mechanism for reducing copper in brakes in California. According to the sponsor, the result is this
measure as a product of a collaborative, consensus-based approach to crafting a workable balance between necessary innovations, long manufacturing timelines, and the stringent water quality compliance deadlines facing California. Details of these studies can be found at [www.suscon.org/brakepad](http://www.suscon.org/brakepad).

4) Baseline Studies and Alternatives. The bill requires DTSC to do work in evaluating what is currently in brake pads and keeping an eye on what the new pads will contain. The bill requires, if levels of nickel, zinc, and antimony increase in pads, that DTSC consult with the appropriate state agency to determine if there is a need to try to limit those levels. This type of study will allow DTSC to keep abreast of the new materials in the brake pads and try to prevent other public health and environmental issues. This coupled with the requirement on brake pad manufacturers to follow a process to evaluate alternatives to copper in brake pads to ensure the alternatives to copper do not have the same problematic characteristics.

5) Long Time Lines for Implementation. Vehicle design, including that of the braking system, is a complex process and must incorporate the lengthy development, safety and performance testing, and manufacturing timelines for brake pads and vehicles. This begs the question of other hazardous materials in an automobile and what can be done to encourage auto manufacturers to look more comprehensively at design and materials used to eliminate the need to address environmental and health threats after production. If the timelines are indeed 10-15 years for design to production, efforts should be undertaken to ensure new cars are built to be as 'clean' as possible during their useful life as well as easy to recycle at the end, including, using non-toxic and non-hazardous materials in construction.

6) Amendment Needed. To further clarify this new article an amendment is need to clarify that DTSC does not have the authority to recall a new vehicle if it is found to have non-compliant brake pads, but is authorized to impose penalties on automobile manufacturers as described in the bill.

**SOURCE**: Sustainable Conservation on behalf of the Brake Pad Partnership, City of San Diego

**SUPPORT**: Akebono Brake Corporation

Alameda Countywide Clean Water Program  
Alameda County  
Bay Area Stormwater Management Agencies Association  
California Coastkeeper Alliance  
California Council for Environmental and Economic Balance  
California Product Stewardship Council  
California Stormwater Quality Association  
City/County Association of Governments of San Mateo County  
City of Camarillo  
City of Concord  
City of Clayton  
City of Cupertino  
City of Los Angeles  
City of Laguna Woods  
City of Monte Sereno  
City of Ojai  
City of Palo Alto  
City of Port Hueneme  
City of San Diego  
City of San Pablo  
City of Thousand Oaks  
CLEAN South Bay

Clean Water Action  
Clean Water Consultants  
Contra Coast Clean Water Program  
Environmental Health Coalition  
San Diego Coastkeeper  
San Francisco Baykeeper  
Santa Clara Valley Urban Runoff Pollution Prevention Program  
Save the Bay  
Sierra Club California  
TDC Environmental  
Ventura Countywide Stormwater Quality Management Program  
West Valley Clean Water Program

OPPOSITION : Alliance of Automobile Manufacturers