Section C.13.c. of the San Francisco Bay Area Municipal Regional Stormwater NPDES Permit (MRP) requires engaging in efforts to reduce the copper discharge from automobile brake pads to surface waters via urban runoff and reporting on these activities. This regional report is intended to document actions taken to comply with Section C.13.c. to fulfill the reporting requirement in Section C.13.c.ii. The time period covered by this report is July 1, 2010 through June 30, 2011 (fiscal year [FY] 2010-2011).

In FY 2010-2011, Bay Area Stormwater Management Agencies Association (BASMAA) members (“permittees”) participated in the Brake Pad Partnership (BPP) process to develop California legislation phasing out copper from certain automobile brake pads sold in California through the California Stormwater Quality Association (CASQA). CASQA is supported by its statewide membership, including BASMAA agencies. CASQA organized its involvement in the BPP and brake pad legislation through the “CASQA BPP Team,” a group of stormwater quality agencies affected by copper or metals 303(d) listings, TMDLs, or permit requirements.

Success – Brake Pad Copper Reduction Legislation Enacted into Law

On September 25, 2010, the goal of the Brake Pad Partnership was achieved when Governor Schwarzenegger signed California Senate Bill (SB) 346. A copy of the enacted version of SB 346 (Chapter 307, Statutes of 2010) is attached. The new law incorporates the BPP’s copper source control program:

- SB 346 requires that brake pads sold in California contain no more than 5% copper by weight by 2021, and no more than 0.5% by 2025. (According to a representative industry analysis, as of 2006 brake pads contained an average of about 8% copper by weight.)
- Starting in 2014, a brake pad labeling system established by SB 346 will provide for ready identification of brake pads with the lowest copper content.
- The law also limits dangerous—but fortunately less common—brake pad pollutants, by prohibiting sale of brake pads containing more than trace amounts of lead, mercury, asbestos, cadmium, and hexavalent chromium in 2014.
- To avoid replacing one environmental problem with another, SB 346 requires manufacturers to examine new formulations carefully and to select alternatives that pose less potential hazard to public health and the environment.
● Consumer safety will be ensured through a limited deadline extension process for which manufacturers can apply starting in 2019 and by provisions allowing continued sales of replacement brake pads for older vehicles. Extension applications must demonstrate no alternative brake friction materials would be safe and available for the vehicles in question by 2025.

● California’s Department of Toxic Substances Control (DTSC) will enforce SB 346.

On the basis of industry data about brake pad copper content, SB 346 should reduce annual statewide copper emissions by more than 1.2 million pounds per year and should reduce brake pad copper levels by about 95%.

The culmination of the Brake Pad Partnership through enactment of SB 346 received nationwide press coverage, including in the San Francisco Chronicle (“New State Law Reduces Copper in Brake Pads”) and Stormwater magazine (“Governor Schwarzenegger Signs Law Protecting Waterways from Copper in Vehicle Brake Pads”).

CASQA prepared a fact sheet (attached) that summarizes the problem posed by copper water pollution from brake pads, the elements of SB 346, and the implications of SB 346 for municipalities.

**Permittee Efforts**

Permittees participated in the BPP and brake pad copper legislation through BASMAA representation on the BPP team, funding contributions toward CASQA staff and consultant time to work on the legislation, and support for the legislation with letters and lobbying efforts. In FY 2010-2011, Permittees’ efforts focused on:

1. Helping the bill’s sponsors develop and revise the bill language to address concerns raised by automobile industry representatives,

2. Advocating for passage of the bill by the California Assembly Appropriations Committee, Assembly floor, and California State Senate floor.

3. Advocating for the Governor to sign the bill into law.

4. Supporting and monitoring initial implementation of the law through CASQA.

To document these activities, the following items are attached:

- BASMAA’s letters of strong support for SB 346 to the Assembly Appropriations Committee and to Governor Schwarzenegger

- Senate floor analysis for SB 346, which lists most support letters (see pages 7-9), including at least a dozen letters generated through Permittees’ efforts

**Initial Implementation of SB 346 is Underway**

CASQA is tracking the implementation of SB 346, maintaining contact with DTSC and brake industry representatives, and providing information as needed. In the nine months since SB 346 was enacted, industry organizations have moved quickly to implement the law:
• The Society of Automotive Engineers (SAE) established the Brake Materials Environmental Task Force to work with DTSC, laboratories, and potential certification organizations to set up the program to certify brake pad compliance with SB 346. A certification organization and certifying laboratories must be approved by DTSC in time for the certifications to be marked on all brake pads by SB 346’s 2014 deadline.

• The likely certification organization, Automotive Manufacturers Equipment Compliance Agency (AMECA), set up its existing list of brake pads meeting safety certification requirements to indicate each pad’s SB 346 compliance certifications.

• SAE formed the Brake Friction Materials Chemical Analysis Methodology Task Force to address brake-pad specific challenges in measuring pad metals and asbestos content. This Task Force is working with DTSC, Washington Department of Ecology, and Oregon Department of Environmental Quality to optimize chemical analysis methods for measuring copper and other metals in brake pads. Both screening methods (for process control) and laboratory chemical analysis methods are being optimized by both the state and private labs, using model brake pad materials provided by the industry. Measuring copper concentrations around the 5% level has proven more challenging than measuring concentrations around the 0.5% level. DTSC anticipates using the outcome of this joint effort as the basis for defining the specific measurement methods that must be used by laboratories certification testing laboratories.

DTSC has also moved quickly to establish the framework for SB 346 implementation. In addition to working with both of the above industry groups, DTSC has established an internal team for SB 346 implementation (including a State Water Board representative) and is completing detailed management planning for the long-term implementation of the law. Within the next two years, DTSC anticipates adopting regulations to specify the details of the certification system. DTSC likely will coordinate its regulations with those from Washington State, which has already initiated a similar regulatory process.

**Encouraging Prospects for Reductions of Copper in Urban Runoff**

To implement SB 346 mandates, brake pad copper reduction will need to be fully integrated into the new vehicle and vehicle parts supply chains. New brake pads will need to be created for all existing and future vehicles. Due to the importance of California’s vehicle market and the interconnection of vehicle parts distribution systems throughout North America, brake pad manufacturers expect that it is unlikely that any manufacturer will produce California-specific products. Instead, copper reduction will be integrated throughout the entire North American brake pad market. This level of change will take many years to complete.

Once the brake pad compliance certification system is established, AMECA’s web-based certification list will provide a simple means to track brake pad copper reduction progress. AMECA’s list includes all brake pads meeting its safety certification standards,
which most brake pads have. The growing fraction of pads with low copper and no-copper certifications should correlate with copper reductions.

Since the certification list is not yet in place and brake pad copper content is trade secret, no quantitative information is available to describe current trends in brake pad copper content. Anecdotal information was used to assess the general trend toward copper reductions in urban runoff.

- Contacts with brake industry representatives indicate that the industry has a strong focus on bringing new, compliant materials to the market quickly. Both vehicle manufacturers and brake pad manufacturers appear to be striving toward materials with less than 0.5% copper, rather than pausing at materials containing in the 5% copper range. A direct transition to preferred products would minimize industry transition costs, while providing copper reductions earlier than required by SB 346.

- Although much of the industry activity to remove copper from brake pads is company confidential trade secret, some companies are publicly touting their new low-copper and copper-free products. For example, Honeywell, FDP Brake, and Williams describe reformulated products and aggressive compliance schedules on their web sites. Companies with existing compliant products are promoting them in trade press (see Bendix and TRW Lucas promotions).

- The transition to low-copper and copper-free brake pad formulations has been a major topic at recent industry conferences (e.g., the fall 2010 SAE Brake Colloquium).

This information provides optimism that copper reductions will occur sooner than required by SB 346.

**Attachments**

1. SB 346, Chaptered version
2. CASQA fact sheet on SB 346 as enacted
3. BASMAA’s letters to the Assembly Appropriations Committee and to Governor Schwarzenegger in support of SB 346
4. Senate floor analysis of SB 346, which lists letters of support (see pages 7-9)
An act to add Article 13.5 (commencing with Section 25250.50) to Chapter 6.5 of Division 20 of, and to repeal Section 25250.65 of, the Health and Safety Code, relating to hazardous materials.

[Approved by Governor September 25, 2010. Filed with Secretary of State September 27, 2010.]

LEGISLATIVE COUNSEL’S DIGEST


(1) Existing law establishes the Department of Toxic Substances Control in the California Environmental Protection Agency, with powers and duties regarding the management of hazardous waste. Existing law, administered by the department, prohibits the management of hazardous waste except in accordance with the hazardous waste control laws, including laws governing the removal of any mercury-containing vehicle light switch from a vehicle, and the regulations adopted by the department. A violation of the hazardous waste control laws is a crime.

The bill, commencing on January 1, 2014, would prohibit the sale of any motor vehicle brake friction materials containing specified constituents in amounts that exceed certain concentrations. The bill would allow, until December 31, 2023, motor vehicle manufacturers and distributors, wholesalers, or retailers of replacement brake friction materials to deplete their inventory of noncompliant materials. The bill, commencing on January 1, 2021, would prohibit motor vehicle brake friction materials containing more than 5% copper by weight from being sold in the state, and, commencing on January 1, 2025, would prohibit motor vehicle brake friction materials exceeding 0.5% copper by weight from being sold in the state.

A violation of these provisions by certain manufacturers would be subject to a civil fine of up to $10,000 per violation. The bill would create the Brake Friction Materials Water Pollution Fund in the State Treasury, and would require those fines to be deposited in the fund. The moneys in the fund would be available, upon appropriation in the annual Budget Act, to implement the bill’s requirements. Because a violation of these provisions also would be a crime pursuant to the hazardous waste control laws, the bill would impose a state-mandated local program.

The bill would establish a process by which a manufacturer may apply to the department for an extension of the prohibition against selling motor vehicle brake friction materials containing more than 0.5% copper by weight, including providing for the establishment of an advisory committee to be involved in that process. The bill would require the Secretary for
Environmental Protection to issue a decision regarding the extension. In making the determination whether to approve or disapprove the extension, the bill would require the secretary to rely upon certain recommendations made by the advisory committee. The bill would require the department to assess a fee for each extension application, and the department would be authorized to expend those fees, upon appropriation by the Legislature, for reimbursement for the costs incurred in implementing this process.

The bill would exempt brake friction materials used for certain motor vehicle classes from its requirements and would exempt from certain prohibitions the sale of vehicles or brake friction materials manufactured prior to certain dates.

The bill would require a vehicle brake friction material manufacturer to screen potential alternatives to copper using the existing Toxics Information Clearinghouse and to use an open source alternatives assessment or this screening analysis to select alternatives to copper that pose less potential hazard to public health and the environment. The vehicle brake friction material manufacturer or importer of record would be required to provide the department with a demonstration, upon request, of the manner in which the selection of alternatives is informed.

The bill would require all new motor vehicles offered for sale, on and after the specified compliance dates, to be equipped with brake friction materials meeting the requirements of this bill and would require all vehicle brake friction material manufacturers, on or after those compliance dates, to certify compliance with those requirements and mark proof of certification on all brake friction materials. The bill would require a vehicle brake friction materials manufacturer to file a copy of the certification with a testing certification agency.

The bill would require the department and the State Water Resources Control Board, by January 1, 2023, to submit a report to the Governor and the Legislature, on the implementation of the bill’s requirements toward meeting the copper total maximum daily load (TMDL) allocations in the state. The bill would repeal this report requirement on January 1, 2027.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:
(a) Friction materials are an essential component of motor vehicle brake systems and of critical importance to transportation safety and the public safety in general.
(b) Debris from friction materials containing copper in all of its forms, including, but not limited to, elemental copper and all of its alloys and
compounds, are generated and released to the surrounding environment in
the course of normal brake system operation.

c) Tens of thousands of pounds of copper and other substances released
from brake friction materials enter California’s streams, rivers, and marine
environment every year.

d) Copper is toxic to many aquatic organisms, including salmon.

e) Limits on the copper content of brake friction materials are essential
for California cities, counties, and industries to comply with federal Clean
Water Act (33 U.S.C. Sec. 1251 et seq.) mandates, including copper water
quality standards and copper total maximum daily loads in California’s
urban watersheds.

(f) Without limits on the copper content of brake friction materials,
California taxpayers face billions of dollars in federal Clean Water Act
compliance costs.

g) Changes in the composition of brake friction materials made to comply
with copper water quality standards and successfully implement copper
total maximum daily loads in California’s urban watersheds should meet
all applicable safety standards.

SEC. 2. Article 13.5 (commencing with Section 25250.50) is added to
Chapter 6.5 of Division 20 of the Health and Safety Code, to read:

Article 13.5. Motor Vehicle Brake Friction Materials

25250.50. For purposes of this article, the following definitions shall
apply:

(a) (1) “Advisory committee” means a committee of nine members
appointed by the secretary on or before January 1, 2019, to consider and
recommend approval or denial of an application for an extension of the
requirements imposed pursuant to Section 25250.53.

(2) A person considered for appointment to the advisory committee shall
disclose any financial interests the person may have in any aspect of the
vehicle or vehicle parts manufacturing industry prior to appointment by the
secretary or, in the case of subparagraph (C) of paragraph (3), prior to
nomination.

(3) The advisory committee shall be composed of the following members:

(A) (i) One-third of the members shall be representatives of the
manufacturers of brake friction materials and motor vehicles, to be appointed
by the secretary in consultation with the chair of the board and the director
of the department.

(ii) If the application for an extension of the requirements imposed
pursuant to Section 25250.53 pertains solely to brake friction materials to
be used on heavy-duty motor vehicles, the members appointed pursuant to
this subparagraph shall represent the manufacturers of heavy-duty brake
friction materials and heavy-duty motor vehicles.

(B) One-third of the members shall be representatives of municipal storm
water quality agencies and nongovernmental environmental organizations,
to be appointed by the secretary in consultation with the chair of the board and the director of the department.

(C) One-third of the members shall be experts in vehicle and braking safety, economics, and other relevant technical areas, to be appointed by the secretary, upon nomination by a majority of the members specified in subparagraph (A) concurrently with a majority of the members specified in subparagraph (B).

(4) For purposes of this subdivision, a “financial interest” shall have the same meaning as a financial interest described in Section 87103 of the Government Code, except only with regard to business entities, real property, or sources of income that are related to the vehicle or vehicle parts manufacturing industry.

(b) “Board” means the State Water Resources Control Board.

(c) “Department” means the Department of Toxic Substances Control.

(d) “Heavy-duty motor vehicle” means a motor vehicle of over 26,000 pounds gross weight.

(e) (1) “Manufacturer,” except where otherwise specified, means both of the following:

(A) A manufacturer or assembler of motor vehicles or motor vehicle equipment.

(B) An importer of motor vehicles or motor vehicle equipment for resale.

(2) A manufacturer includes a vehicle brake friction materials manufacturer.

(f) “Motor vehicle” and “vehicle” has the same meaning as the definition of “vehicle” in Section 670 of the Vehicle Code.

(g) “Testing certification agency” means a third-party testing certification agency that is utilized by a vehicle brake friction materials manufacturer and that has an accredited laboratory program that provides testing in accordance with the certification agency requirements that are approved by the department.

25250.51. (a) On and after January 1, 2014, any motor vehicle brake friction materials containing any of the following constituents in an amount that exceeds the following concentrations shall not be sold in this state:

(1) Cadmium and its compounds: 0.01 percent by weight.

(2) Chromium (VI)-salts: 0.1 percent by weight.

(3) Lead and its compounds: 0.1 percent by weight.

(4) Mercury and its compounds: 0.1 percent by weight.

(5) Asbestiform fibers: 0.1 percent by weight.

(b) Motor vehicle manufacturers and distributors, wholesalers, or retailers of replacement brake friction materials may continue to offer for sale brake friction materials not certified as compliant with subdivision (a) solely for the purpose of depletion of inventories until December 31, 2023.

25250.52. On and after January 1, 2021, any motor vehicle brake friction materials exceeding 5 percent copper by weight shall not be sold in this state, except as otherwise provided in this article.
25250.53. On and after January 1, 2025, any motor vehicle brake friction materials exceeding 0.5 percent copper by weight shall not be sold in this state, except as otherwise provided in this article.

25250.54. (a) (1) On and after January 1, 2019, a manufacturer may apply to the department for a one-year, two-year, or three-year extension of the January 1, 2025, deadline established in Section 25250.53, except as provided in subdivision (h).

(2) An extension application submitted pursuant to this section shall be submitted based on vehicle model, class, platform, or other vehicle-based category, and not on the basis of the brake friction material formulation.

(3) The application shall be accompanied by documentation that will allow the advisory committee to make a recommendation pursuant to subdivisions (e) and (f).

(4) The documentation shall include a scientifically sound quantitative estimate of the quantity of copper that would be emitted if the extension is granted, including a description of the assumptions used in arriving at that estimate.

(b) No more than 30 days after receipt of an application for an extension pursuant to subdivision (a), the department shall do all of the following:

(1) Post a notice of receipt on the department’s Internet Web site that includes the vehicle model, class, platform, or other vehicle-based category, whether the brake friction material is intended for use in original equipment or replacement parts, and the quantity of copper that would be emitted if the extension is granted.

(2) Consult with the board and the State Air Resources Board.

(3) Solicit comment from the public and from scientific and vehicle engineering experts on the availability of generally affordable compliant brake friction materials, their safety and performance characteristics, and the feasibility of brake pad copper emissions reduction through means other than friction material reformulation.

(c) (1) In consultation with the board, the department shall determine if sufficient documentation has been presented upon which to base a decision. If the department determines that further documentation is needed, it shall deliver a detailed request for further documentation to the applicant.

(2) Not later than 30 days after receipt of the application for an extension pursuant to subdivision (a), the department shall forward the application to the advisory committee for the purpose of the advisory committee making a recommendation pursuant to subdivisions (e) and (f).

(d) (1) In considering any application for an extension, the advisory committee shall consider all of the documentation supplied by the applicant pursuant to subdivision (a).

(2) The advisory committee may request, no later than 75 days after receipt of the application from the department pursuant to subdivision (c), further documentation from the applicant.

(3) The advisory committee shall hold at least one public hearing at which it shall accept and consider comments from the public on each category of application. The advisory committee meetings shall be open to the public
and are subject to the Bagley-Keene Open Meeting Act (Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code).

(e) (1) The advisory committee shall recommend to the secretary that the extension be approved if the advisory committee determines that there are no brake friction materials that are safe and available for individual or multiple vehicle models, classes, platforms, or other vehicle-based categories identified in the application.

(2) The advisory committee shall recommend to the secretary that the extension not be approved if the advisory committee determines that alternative brake friction materials are safe and available for individual or multiple vehicle models, classes, platforms, or other vehicle-based categories identified in the application.

(3) For purposes of this section, “safe and available” shall mean all of the following:
   (A) The brake system for which the alternative brake friction material is manufactured meets applicable federal safety standards, or if no federal standard exists, a widely accepted safety standard.
   (B) Acceptable alternative brake friction materials are commercially available for the individual or multiple vehicles, classes, platforms, or vehicle-based categories identified in the application.
   (C) Adequate industry testing and production capacity exists to supply the alternative brake friction materials for use on the individual or multiple vehicles, classes, platforms, or vehicle-based categories identified in the application.
   (D) The alternative brake friction material is technically feasible for use on the individual or multiple vehicles, classes, platforms, or vehicle-based categories identified in the application.
   (E) The alternative brake friction materials meet customer performance expectations, including noise, wear, vibration, and durability for the individual or multiple vehicle classes, platforms, or vehicle-based categories identified in the application.
   (F) The alternative acceptable brake friction material is economically feasible with respect to the industry and the cost to the consumer for the individual or multiple vehicles, classes, platforms, or vehicle-based categories identified in the application.

(4) The advisory committee shall provide relevant data to the department and the board concerning the potential impacts of the extension on California watersheds for purposes of the report required pursuant to Section 25250.65.

(f) (1) No sooner than 60 days and no later than 120 days after the department solicits comments pursuant to paragraph (3) of subdivision (b), the advisory committee shall make a recommendation to the secretary in accordance with subdivisions (d) and (e) as to whether the application for extension should be approved or not approved.

(2) The recommendation of the advisory committee that the secretary approve or not approve the application for extension shall be accompanied by documentation of the basis for the recommendation.
(g) (1) The secretary shall make available the recommendation of the advisory committee and the accompanying documentation for public review and comment for 60 days following receipt of the recommendation from the advisory committee.

(2) The secretary shall consider public comments on the advisory committee’s recommendation and issue a final decision on the application for extension no later than 45 days after the conclusion of the 60-day comment period.

(3) In making the determination whether to approve or disapprove the extension, the secretary shall rely upon the recommendations made by the advisory committee pursuant to subdivision (f).

(4) If the secretary does not follow the recommendation of the advisory committee made pursuant to subdivision (f), he or she shall explain in writing the basis of his or her decision.

(h) (1) On or before December 31, 2029, a manufacturer with an approved extension of the January 1, 2025, deadline established in Section 25250.53, may reapply to the department for additional two-year extensions from the deadline in accordance with a schedule that may be established by the department.

(2) Except as provided in subdivision (i), a manufacturer may not apply on or after January 1, 2030, for an extension of the January 1, 2025, deadline established in Section 25250.53.

(3) The department shall comply with all of the requirements of this section when granting an additional extension of the January 1, 2025, deadline pursuant to this subdivision.

(i) (1) On and after January 1, 2030, a manufacturer of vehicle brake friction materials to be used on heavy-duty vehicles with an approved extension of the January 1, 2025, deadline established in Section 25250.53, may reapply to the department for additional two-year extensions from the deadline established in Section 25250.53, that results in an extension of that deadline to a date on and after January 1, 2032.

(2) The department shall comply with all of the requirements of this section when granting an additional extension of the January 1, 2025, deadline pursuant to this subdivision.

(j) The department shall assess a fee for each application for an extension sufficient to cover actual costs incurred in implementing this section. The department may expend the fees collected pursuant to this subdivision, upon appropriation by the Legislature, for reimbursement for the costs incurred in implementing this section.

(k) When granting an extension pursuant to this section, the department, board, advisory committee, and secretary shall comply with the requirements of Section 25358.2, to ensure the protection of trade secrets, as defined in Section 25358.2.

25250.55. Brake friction materials for the following motor vehicle classes are exempt from this article:

(a) Military tactical support vehicles.
(b) Vehicles employing internal closed oil immersed brakes, or a similar brake system that is fully contained and emits no copper, other debris, or fluids under normal operating conditions.

(c) Brakes designed for the primary purpose of holding the vehicle stationary and not designed to be used while the vehicle is in motion.

(d) Motorcycles.

(e) Motor vehicles subject to voluntary or mandatory recalls of brake friction materials or systems due to safety concerns. This exemption shall expire upon the lifting of the recall and provision of new brake friction materials that comply with this article.

(f) Motor vehicles manufactured by small volume manufacturers, as defined in Section 1900 of Title 13 of the California Code of Regulations.

(g) Vehicles manufactured prior to January 1, 2021, and brake friction materials for use on vehicles manufactured prior to January 1, 2021, from the requirements of Section 25250.52.

(h) Vehicles manufactured prior to January 1, 2025, and brake friction materials for use on vehicles manufactured prior to January 1, 2025, from the requirements of Section 25250.53.

(i) Vehicles for which an extension from the requirements of Section 25250.53 was approved pursuant to Section 25250.54.

25250.56. (a) In developing new formulations to comply with Sections 25250.52 and 25250.53, a manufacturer of vehicle brake friction materials shall screen potential alternatives to the use of copper by using the Toxic Information Clearinghouse developed by the department and the Office of Environmental Health Hazard Assessment pursuant to Section 25256, for the purpose of identifying potential impacts of these potential alternatives on public health and the environment.

(b) In conducting the screening analysis required by subdivision (a), a manufacturer of vehicle brake friction materials shall, using information available to the manufacturer at the time of the analysis, including information from the department and other sources, consider the environmental fate of brake friction materials and their emissions through all phases of the brake friction material life cycle.

(c) A manufacturer of vehicle brake friction materials shall use the screening analysis required by subdivision (a) or an open source alternatives assessment to select alternatives to copper that pose less potential hazard to public health and the environment.

(d) Upon request by the department, a manufacturer of vehicle brake friction materials or importer of record shall provide a summary demonstrating how the screening analysis conducted pursuant to this section or an open source alternatives assessment is used to inform the selection of alternatives to copper that pose less potential hazard to public health and the environment, as required by subdivision (c).

25250.60. (a) The department shall consult with the brake friction materials manufacturing industry in the development of all criteria for testing and marking brake friction materials and adopting certification procedures for brake friction materials, as required pursuant to this article. The mark
of proof of certification on brake friction materials shall identify the brake friction material manufacturer, be easily applied, be easily legible, and not impose unreasonable additional costs on manufacturers due to the use of additional equipment or other factors.

(b) On and after January 1, 2014, any new motor vehicle offered for sale in the state shall be equipped with brake friction materials that comply with Section 25250.51.

(c) (1) On and after January 1, 2014, a manufacturer of vehicle brake friction materials used in brakes on new motor vehicles or as replacement parts that are sold in the state shall certify compliance declaring that its formulation for brake friction materials complies with Section 25250.51.

(2) A vehicle brake friction material manufacturer shall mark proof of certification pursuant to this subdivision on all brake friction materials.

(d) On and after January 1, 2021, any new motor vehicle offered for sale in the state shall be equipped with brake friction materials that comply with Section 25250.52.

(e) (1) On and after January 1, 2021, a manufacturer of vehicle brake friction materials used in brakes on new motor vehicles or as replacement parts for those vehicles that are sold in the state shall certify compliance declaring that its formulation for brake friction materials complies with Section 25250.52.

(2) A vehicle brake friction material manufacturer shall mark proof of certification with this subdivision on all brake friction materials.

(f) On and after January 1, 2025, any new motor vehicle offered for sale in the state shall be equipped with brake friction materials that comply with Section 25250.53.

(g) (1) On and after January 1, 2025, a manufacturer of vehicle brake friction materials used in brakes on new motor vehicles or as replacement parts for those vehicles that are sold in the state shall certify compliance declaring that its formulation for brake friction materials complies with Section 25250.53.

(2) A vehicle brake friction material manufacturer shall mark proof of certification with this subdivision on all brake friction materials.

(h) Prior to offering brake friction materials for sale in this state, a manufacturer of vehicle brake friction materials shall file a copy of the certification for each of its brake friction materials formulations with a testing certification agency. Each certification shall be made available within a reasonable period of time on the testing certification agency’s Internet Web site at no cost to the department and to the public, and shall serve as official registration of certification for compliance with this section.

(i) A manufacturer of vehicle brake friction materials may obtain from a testing certification agency a certification of compliance with the requirements of Section 25250.51, 25250.52, or 25250.53 at any time prior to the dates specified in those sections.

(j) The certification and mark of proof required pursuant to this section shall show a consistent date format, designation, and labeling to facilitate
acceptance in all 50 states and United States territories for purposes of demonstrating compliance with all applicable requirements.

25250.62. (a) A violation of this article by a vehicle manufacturer, a vehicle brake friction materials manufacturer, a distributor, or a retailer, shall be subject to a civil fine of up to ten thousand dollars ($10,000) per violation.

(b) The department shall enforce this article. The department shall remove from sale in this state any replacement brake friction materials determined to be not in compliance with this article.

(c) If the department determines that a distributor, wholesaler, or retailer of replacement brake friction materials has been offering noncompliant brake friction materials for sale in the state, it shall allow the distributor, wholesaler, or retailer of replacement brake friction materials to establish that it obtained the noncompliant brake friction materials in good faith and after exercising due diligence in verifying that the material complied with this article prior to assessing fines and penalties pursuant to subdivision (a).

(d) In determining the amount of the civil fine to be assessed for a violation of this article, the department shall consider the particular circumstances of the violation, including, but not limited to, the amount of noncompliant brake friction material offered for sale in California and whether previous violations have occurred.

(e) The department may waive the imposition of a fine and issue a letter of warning if it determines, based on criteria, including, but not limited to, the amount of brake friction material offered for sale, the presence or absence of prior violations, and whether due diligence was exercised in determining that the brake friction materials offered for sale complied with this article, and that the violation of this article does not merit the imposition of a fine.

(f) A distributor, wholesaler, or retailer found by the department to have offered for sale noncompliant replacement brake materials shall cooperate with the department in the removal of the noncompliant brake friction materials from sale, inform the department of measures being implemented to avoid repeat violations, and provide the department with information that will assist in the identification and location of the source or sources of the noncompliant brake friction materials.

(g) In enforcing this article, the department shall not recall automobiles fitted with brake friction materials that do not comply with this article.

(h) A motor vehicle manufacturer that violates this article shall notify the registered owner of the vehicle within six months of knowledge of the violation and shall replace, at no cost to the owner, the noncompliant brake friction material with brake friction material that complies with this article. A motor vehicle manufacturer that fails to provide the required notification to registered owners of the affected vehicles within six months of knowledge of the violation is subject to fines and penalties authorized pursuant to subdivision (a).

25250.64. (a) The Brake Friction Materials Water Pollution Fund is hereby established in the State Treasury. Notwithstanding Section 25192,
all fines and penalties collected by the department pursuant to this article shall be deposited in the fund.

(b) The moneys in the fund shall be expended, upon appropriation by the Legislature in the annual Budget Act, solely for the full implementation of this article by the department.

25250.65. (a) On or before January 1, 2023, the department and the board shall submit to the Governor and the Legislature, in compliance with Section 9795 of the Government Code, a report on the implementation of vehicle brake copper reduction efforts and the progress of this article toward meeting the copper total maximum daily load (TMDL) allocations in the state. The report shall make recommendations on actions necessary to address any deficiencies in meeting these copper TMDL allocations, including, but not limited to:

1) Imposing additional restrictions on the extensions granted to manufacturers pursuant to Section 25250.54.
2) Imposing additional restrictions on the exemptions from this article provided by Section 25250.55.
3) Allowances for permitting a manufacturer to sell existing inventory, if the additional restrictions described in paragraphs (1) and (2) are implemented.

(b) Pursuant to Section 10231.5 of the Government Code, this section is repealed on January 1, 2027.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.
Fact Sheet

SB 346 and Copper Compliance for Stormwater Permittees

A California law enacted in 2010, SB 346 (Kehoe) set in place a program that will nearly eliminate copper use in brake pads. This law grew out of a unique collaboration among brake pad manufacturers, government agencies, and environmental groups called the “Brake Pad Partnership,” which was initiated by California municipalities and strongly supported by CASQA. Enacting SB 346 into law was truly a landmark event for California municipalities, which stand to save from $50 to $100 billion in copper-related Clean Water Act compliance costs over the next 30 to 40 years.

Importance of Brake Pad Copper Regulation

A simple action—vehicle drivers hitting the brakes—released about 1.3 million pounds of copper into California’s environment in 2010. Each time vehicle brakes engage, a tiny amount of fine dust wears off of the vehicle’s brake pads. When it rains, this dust washes into storm drains, which drain directly to creeks, rivers, and marine waters without any wastewater treatment. Scientific studies indicate that dust generated by vehicle brakes is by far the most significant source of copper in urban watersheds.

Copper is a major pollutant of concern for stormwater management agencies. Copper is one of the pollutants in stormwater that most often exceeds water quality standards at the point of discharge. Copper is also a common water pollution problem in California’s waterways; in 2010, the State Water Board identified copper as causing impairment in 83 California waterways. California Water Boards have adopted 18 copper Total Maximum Daily Loads (TMDLs), primarily in Southern California.

Copper in Brake Pads

Copper is in most, but not all, brake pads. Although copper is not necessary for braking safety, it provides other desirable properties. For example, it helps brakes remain effective through extended braking events and can be used to prevent annoying squealing and shuddering.

Brake pads with low or no copper are sold today and safely stop cars. Due to the current lack of copper content labels, no one—not even experienced mechanics—can readily determine brake pad copper content. In general, “semi-metallic” brake pads have the least copper; “organic” brake pads have the most copper. Starting in 2014, a brake pad labeling system established by SB 346 will provide for ready identification of brake pads with the lowest copper content.

Provisions of SB 346

SB 346 requires that brake pads sold in California contain no more than 5% copper by weight by 2021, and no more than 0.5% by 2025. According to a representative industry analysis, as of 2006 brake pads contained an average of about 8% copper by weight. The law also limits dangerous—but fortunately less common—brake pad pollutants, by prohibiting sale of brake pads containing more than trace amounts of lead, mercury, asbestos, cadmium, and hexavalent chromium in 2014. To avoid replacing one environmental problem with another, SB 346 requires manufacturers to examine new formulations carefully and to select alternatives that pose less potential hazard to public health and the environment. Consumer safety will be ensured through a limited deadline extension process (available starting only when...
a manufacturer demonstrates that no alternative brake friction materials will be safe and available) and by provisions allowing continued sales of replacement brake pads for older vehicles.

California’s Department of Toxic Substances Control (DTSC) will enforce SB 346. DTSC is working with manufacturers and other states to establish nationally accepted criteria for certifying that new brake pads comply with its requirements and to design the compliance markings that will be on every brake pad.

What SB 346 Means for Stormwater Copper Compliance

CASQA pressed for a “true source control” solution to the brake pad copper problem recognizing that attempting to treat runoff to remove brake pad copper would have been costly and unsuccessful. Treating stormwater runoff to remove copper is technically and financially challenging because expensive land-intensive infiltration-type treatment systems are the only measures capable of removing enough copper to meet water quality standards. Since brake pads appear in all developed areas, treatment of runoff from all land uses would have been required, entailing re-plumbing of entire storm drain systems and buying creek and ocean front land for treatment facilities, which would have disrupted established communities and ecosystems. The relatively small investment that CASQA and its members made in brake pad source control avoided billions of dollars in treatment cost. The Brake Pad Partnership’s proactive problem-solving approach ensured that the solution was acceptable to the environmental community and state and Federal regulators.

A near phase-out of copper use in brake pads is essential for many California municipalities and private businesses to comply with NDPES permits, especially permits that implement copper Total Maximum Daily Loads. In highly urbanized watersheds, urban runoff copper levels will exceed required concentrations until most vehicles have installed brake pads containing less than 0.5% copper.

The copper reduction time frames in SB 346 are inconsistent with some adopted copper TMDLs. In addition to providing assistance to members that are working with regulators to address inconsistencies, CASQA plans to examine the potential for the vehicle industry to achieve brake pad copper reductions ahead of required timeframes. Once the low copper brake pad labeling system is in place, options include various voluntary programs, such as preferences for low-copper brake pads in purchasing specifications.

Most municipalities will need to control one or more other copper sources to ensure compliance. Copper sources that may need to be addressed through local actions and/or partnerships with other regulators include:

» Local copper emitting industries (e.g., boatyards, smelters)
» Architectural copper (controls like coatings or on-site treatment systems)
» Swimming pool, spa and fountain discharges (discharge management)

The enactment of SB 346 into law was the first major accomplishment of CASQA’s Source Control Initiative. Like brake pad copper, many other pollutants are candidates for “true source control,” which is an alternative, cost-saving compliance strategy.
July 23, 2010
The Honorable Felipe Fuentes  
Chair, Assembly Appropriations Committee  
State Capitol, Room 2114  
Sacramento, CA 95814

RE: SB 346 (Kehoe) – Source Control of Copper Water Pollution – Support As Amended August 2

Dear Assemblymember Fuentes:

The Bay Area Stormwater Management Agencies Association (BASMAA) strongly supports SB 346 (Kehoe), which will provide California’s cities and counties with the tool they need to comply with stringent federal and state water quality mandates and avoid billions of dollars in costs and potential penalties. SB 346 requires that copper, a significant aquatic pollutant, be reduced to a de minimis 0.5% by weight in vehicle brake pads sold in California by 2025. Peer-reviewed scientific studies have established that by far the most significant source of copper in urban watersheds is the fine dust generated from the use of brake pads. This copper poses threats to aquatic life including migratory salmonid fish.

Pursuant to the requirements of the federal Clean Water Act, the San Francisco Bay Regional Water Quality Control Board mandates that Bay Area municipalities control copper discharges in urban runoff. Other Regional Water Quality Control Boards in Southern California have already imposed copper Total Maximum Daily Loads (TMDLs). The only technically and economically feasible way for municipalities to comply with these looming deadlines is to eliminate copper pollution at its primary source – vehicle brake pads – no later than 2025. Any attempt to try and remove copper in highly urbanized areas that is already dissolved in stormwater would most likely require large tracts of land and construction of new treatment infrastructure. The California Stormwater Quality Association estimates that this could easily cost already fiscally strapped local governments billions of dollars statewide with no guarantee that these methods would actually succeed.

It is our understanding that two days of constructive and productive meetings with industry, environmental, and local government representatives earlier this month resulted in amendments that accept nearly all of industry’s requests in their entirety and are supported by environmental and local government representatives. SB 346 provides the auto industry with a generous timeline within which to develop and distribute safe and effective copper-free brake friction materials while also giving cities and counties the ability to demonstrate that they will meet their copper TMDLs in a timely manner. BASMAA is pleased to support SB 346.

Sincerely,

James Scanlin  
Chair, Bay Area Stormwater Management Agencies Association

cc: Senator Christine Kehoe  
Assembly Appropriations Committee members
September 14, 2010

Governor Arnold Schwarzenegger
State Capitol Building
Sacramento, CA 95814

RE: SB 346 (Kehoe) – SIGN

Dear Governor Schwarzenegger:

The Bay Area Stormwater Management Agencies Association (BASMAA1) strongly supports SB 346 (Kehoe), which will provide California’s cities, counties, and the State (i.e., Caltrans) with the tool they need to comply with stringent federal and state water quality mandates and avoid billions of dollars in costs and potential penalties.

Pursuant to the requirements of the federal Clean Water Act, the Regional Water Quality Control Boards in Los Angeles and San Diego have already imposed deadlines and copper Total Maximum Daily Load (TMDL) limits on discharges of stormwater to California waters. Similar TMDLs are expected in other urban watersheds across the state in the near future. The only technically and economically feasible way for municipalities and the State to comply with these looming deadlines is to eliminate copper pollution at its primary source – vehicle brake pads. Any attempt to try and remove copper that is dissolved in stormwater in highly urbanized areas would most likely require large tracts of land and construction of new treatment infrastructure. Estimates are that this approach could easily cost fiscally strapped local governments, let alone the State of California, billions of dollars statewide with no guarantee that these methods would actually succeed.

The work to reduce copper in brake pads needs to start now. Local governments and the State need to demonstrate now to EPA, the Water Boards, and environmental stakeholders that they have solid TMDL compliance plans that can be achieved by the final compliance dates, and the auto industry needs to start now to complete the transition to new brake pad materials in time to help meet those deadlines. All parties need to be able bank now on copper in brake pads being eliminated as a pollution source to the State’s waters and SB 346 becoming law is the best way to meet that objective.

BASMAA is proud to have supported the Brake Pad Partnership since its earliest days in the mid-90s – a private-public partnership that led to SB 346. SB 346 is based on 14 years of scientifically based, shared fact-finding and thoughtful discussion and negotiation. As a result, SB 346 provides the auto industry with a reasonable timeline within which to develop and distribute safe and effective copper-free brake friction materials while also giving cities and counties the ability to demonstrate that they will meet their copper TMDLs in a timely manner. SB 346 is the embodiment of good legislation and that was recognized when both the Senate and the Assembly, in overwhelming votes with significant bi-partisan support, approved it. All the major auto industries, environmental groups, and local governments support SB 346, and the bill has no recorded opposition.

BASMAA respectfully encourages your signature on this landmark legislation.

Sincerely,

James Scanlin
Chair, Bay Area Stormwater Management Agencies Association

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1 BASMAA is a 501(c)(3) non-profit organization comprised of the municipal stormwater programs in the San Francisco Bay Area representing 96 agencies, including 84 cities and 7 counties. BASMAA is focused on regional challenges and opportunities to improving the quality of stormwater that flows to our local creeks, San Francisco Bay and Delta, and the Ocean.
SB 346 Senate Bill - Bill Analysis

BILL ANALYSIS

UNFINISHED BUSINESS

Bill No: SB 346
Author: Kehoe (D), et al
Amended: 8/25/10
Vote: 21

SENATE ENV. QUALITY COMMITTEE : 5-2, 4/20/09
AYES: Simitian, Corbett, Hancock, Lowenthal, Pavley
NOES: Runner, Ashburn

SENATE APPROPRIATIONS COMMITTEE : 8-5, 5/26/09
AYES: Kehoe, Corbett, DeSaulnier, Hancock, Leno, Oropeza, Wolk, Yee
NOES: Cox, Denham, Runner, Walters, Wyland

SENATE FLOOR : 22-16, 6/3/09
AYES: Alquist, Calderon, Cedillo, Corbett, DeSaulnier, Ducheny, Florez, Hancock, Kehoe, Leno, Liu, Lowenthal, Negrete McLeod, Oropeza, Padilla, Pavley, Romero, Simitian, Steinberg, Wiggins, Wolk, Yee
NOES: Aanestad, Ashburn, Benoit, Cogdill, Correa, Cox, Denham, Dutton, Harman, Hollingsworth, Huff, Maldonado, Strickland, Walters, Wright, Wyland
NO VOTE RECORDED: Runner, Vacancy

ASSEMBLY FLOOR: 70-3, 8/30/10 - See last page for vote

SUBJECT: Hazardous materials: motor vehicle brake friction materials

SOURCE: City of San Diego
DIGEST: This bill restricts the use of copper and other toxic chemicals in automobile brake pads.

Assembly Amendments revise and recast various provisions of the bill while maintaining the intent of the bill.

ANALYSIS:

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, and phthalates.

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

This bill:

1. Limits the use of copper in motor vehicle brake pads to
no more than five percent by weight on or after January 1, 2021, and no more than .5 percent by weight on or after January 2025.

2. Exempts specific vehicles from the copper limitation in brake pads including (a) military vehicles, (b) vehicles with internal closed oil immersed brakes that do not emit copper or other debris under normal operating conditions, (c) parking brakes, (d) vehicles manufactured by small volume manufactures, and (e) motorcycles.

3. Exempts from the five percent copper brake pad restrictions all vehicles, or brake pads manufactured for use on those vehicles, manufactured prior to January 1, 2021.

4. Exempts from the .5 percent copper brake pad restrictions all vehicles, or brake pads manufactured for use on those vehicles, manufactured prior to December 31, 2024.

5. Restricts the use of the following toxic materials in motor vehicle brake pads by January 1, 2014:

   - 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
   - Mercury and its compounds: 0.1 percent by weight

6. Requires manufacturers of brake pads to review safety data on alternatives to copper in brake pads. Allows manufactures to conduct an additional alternatives analysis based on an open source alternative analysis carried out by the brake pad manufacturer.

7. Requires brake pad manufacturers, beginning in 2014, to obtain certification to demonstrate compliance with the bill's limits and to include that certification of the content of the brake pads.
8. Requires vehicle manufacturers and retailers of brake pads to ensure that only compliant brake pads are sold in this state.

CONTINUED

9. Establishes a civil fine of up to $10,000 per violation of the brake pad limitations and certification requirements.

10. Allows a brake pad manufacturer, effective January 1, 2021, to apply to DTSC for a one, two or three-year extension of the 2025 ban and for additional two-year extensions until January 1, 2030. Heavy-duty brake pad manufacturers only will be able to apply for two-year extensions until January 1, 2032.

11. Requires an application for an exemption to be forwarded by DTSC to the Copper Brake Advisory Committee (CBAC), which will be a nine-member committee appointed by the Secretary of the California Environmental Protection Agency (Cal-EPA). The CBAC will be composed of:

   Three members representing the manufactures of brake friction materials and motor vehicles.

   Three members representing municipal storm water quality agencies and nongovernmental environmental organizations.

   Three members who are experts in vehicle and braking safety, economics and or relevant technical areas.

12. Provides that members of the CBAC shall disclose financial interest related to vehicle or vehicle parts prior to being appointed.

13. Allows the CBAC to request additional information from DTSC with 75 days of receipt of a request for an extension.

14. Provides that the Secretary of Cal-EPA shall rely on the recommendations of the CBAC when making a determination
on an extension request.

15. Establishes DTSC as the enforcing agency for the requirements of this bill and permits them to remove non-compliant brake pads from sale, but specifically does not authorize the recall of vehicles to remove the

CONTINUED

illegal brake pads.

16. Requires DTSC and SWRCB to submit a report to the Governor and Legislature not later than January 1, 2023, on recommended actions necessary to address any deficiencies in meeting the copper reduction targets established by this bill.

Comments

According to the author's office, 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.

According to the United States EPA, elevated levels of copper are toxic to aquatic environments and may adversely affect fish, invertebrates, plants, and amphibians. Acute toxic effects may include mortality of organisms; chronic toxicity can result in reductions in survival, reproduction, and growth.

Motor vehicles are a major source of toxic contaminants such as copper, a metal that originates from brake pad wear. Copper and other pollutants are deposited on roads and other impervious surfaces and then transported to aquatic habitats via stormwater runoff.

Total Maximum Daily Loads . The 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. 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.

This bill requires brake pad manufacturers to reduce the use of copper in brake pads sold in California to no more than five percent by 2021, and no more than 0.5 percent by 2025. This bill also (1) creates limits for other brake pad materials, (2) establishes a certification process for compliance, (3) establishes civil penalties for violations, (4) creates a Brake Friction Materials Water Pollution Fund into which any fines and penalties would be deposited, and (5) provides a mechanism that manufacturers can use to obtain extensions of the bill's deadlines if they cannot provide a safe and compliant product in time in order to make sure that Californians' safety is not compromised in any way. The goal is to improve California's water quality and allow stormwater agencies to meet their TMDLs, while also ensuring that brakes remain affordable and fully able to meet rigorous safety and performance standards.

**FISCAL EFFECT**: Appropriation: No Fiscal Com.: Yes Local: Yes

According to the Assembly Appropriations Committee, this bill will result in costs to DTSC and Cal-EPA including:

1. One-time costs to DTSC of approximately $200,000 during 2010-11 and 2011-12 for manufacturer outreach and education, including development of website materials. (Hazardous Waste Control Account (HWCA))

2. One-time costs to DTSC of approximately $200,000 during 2010-11 and 2011-12 to develop certification and marking
3. One-time cost to DTSC of approximately $100,000 during 2011-12 to initially certify third-party certifiers of brake pads. (HWCA)

4. Minor annual costs to DTSC in the tens of thousands of dollars beginning in 2013-14 to accept filings by manufacturers of brake pad certification, covered fully by filing fee. (HWCA)

CONTINUED

5. Annual costs to DTSC of approximately $250,000 beginning in 2020-21 to accept and review requests for extension and exemption withdrawal, fully covered by request fees. (HWCA or Brake Friction Materials Water Pollution Fund (BFMWPF))

6. Annual costs to DTSC ranging from $250,000 to $500,000 beginning in 2013-14 to enforce bans, including inspections of brake manufacturers and third-party certifiers and laboratory analysis of brake pads. (HWCA or BFMWPF)

7. Minor annual costs to the Secretary for Cal-EPA in the tens of dollars beginning in 2020-21 to review extension and exemption requests. (General Fund)

8. Minor, absorbable annual costs to the Air Resources Board and DTSC, beginning in 2020-21, to consult with DTSC on extension and exemption requests.

SUPPORT: (Verified 8/27/10)

City of San Diego (co-source)
Sustainable Conservation on Behalf of the Brake Pad Partnership (co-source)
Alameda County Board of Supervisors
Alliance of Automobile Manufacturers
American Society of Civil Engineers
Association of International Automobile Manufacturers
Automotive Aftermarket Industry Association
Automotive Aftermarket Suppliers Association
Automotive Service Councils of California
Bay Area Stormwater Management Agencies Association
(representing 84 cities and seven counties)
Best Brakes
California Association of Environmental Health Administrators
California Autobody Association
California Automotive Business Coalition
California Automotive Wholesalers' Association
California Coastkeeper Alliance
California Council for Environmental and Economic Balance
California League of Conservation Voters

CONTINUED
Authority)
Heal the Bay
Industrial Environmental Association
Larry’s Auto Works
League of California Cities
Los Angeles County Flood Control District
Los Angeles County Stormwater Quality Partnership
Motor and Equipment Manufacturers Association
Natural Resources Defense Council
Ocean Conservancy
Planning and Conservation League
Port of San Diego
Power Slot
San Diego Coastkeeper

CONTINUED

San Francisco Public Utilities Commission
Sanitation Districts of Los Angeles County
Santa Clara Valley Urban Runoff Pollution Prevention Program
Save the Bay
Sierra Club California
Stop Tech
StopWaste.Org
TDC Environmental
Truck Manufacturers Association
United States Navy
University of California, San Diego
Ventura County Board of Supervisors
Ventura Countywide Stormwater Quality Management Program
West Valley Clean Water Program

ASSEMBLY FLOOR:
AYES: Adams, Ammiano, Arambula, Bass, Beall, Tom Berryhill, Block, Blumenfield, Bradford, Brownley, Buchanan, Caballero, Charles Calderon, Carter, Chesbro, Cook, Coto, Davis, De La Torre, De Leon, Eng, Evans, Feuer, Fletcher, Fong, Fuentes, Fuller, Furutani, Galgiani, Gatto, Gilmore, Hagman, Hall, Harkey, Hayashi, Hernandez, Hill, Huber, Huffman, Jeffries, Jones, Lieu, Logue, Bonnie Lowenthal, Mendoza, Miller, Monning, Nava, Nestande, Niello, Nielsen, Norby, V. Manuel Perez, Portantino, Ruskin, Salas, Saldana, Silva, Skinner, Smyth, Solorio, Audra Strickland, Swanson, Torlakson, Torres, Torrico,
Tran, Villines, Yamada, John A. Perez
NOES: Anderson, Conway, Gaines
NO VOTE RECORDED: Bill Berryhill, DeVore, Garrick, Knight, Ma, Vacancy, Vacancy

TSM: mw 8/31/10 Senate Floor Analyses

SUPPORT/OPPOSITION: SEE ABOVE

**** END ****

CONTINUED