

**FINAL STATEMENT OF REASONS**  
**California Brake Friction Material Regulations**  
**Department of Toxic Substances Control Reference Number: R-2014-01**  
**Office of Administrative Law Notice File Number: Z-2016-0329-04**

**UPDATE OF INITIAL STATEMENT OF REASONS**

Text proposed to be added for the 45-day comment period is displayed in underline type.

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Text proposed to be added for the 15-day comment period is displayed in double underline type.

Text proposed to be deleted for the 15-day comment period is displayed in ~~double underline~~ type.

**REPORTS RELIED ON:**

Revised following reference citation:

18. SAE J 2975:~~DECEMBER~~DEC2013, Measurement of Copper and Other Elements in Brake Friction Materials, available from the Society of Automotive Engineers (SAE) Customer Service, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

**MANDATED USE OF SPECIFIC TECHNOLOGIES OR EQUIPMENT:**

Updated the references to SAE J2975 in this section:

The proposed regulations specify the accreditation process, requirements, and testing protocols that analytical laboratories must use on brake friction materials performing SAE Standard J 2975: ~~MAY2015~~DEC2013.

DTSC has worked with the State of Washington Department of Ecology and the Society of Automotive Engineers (SAE) International Brake Materials Environmental Task Force to develop standards that satisfy the requirements in California and the State of Washington regarding the testing, marking and certification of brake friction materials. The effort resulted in the development of SAE Standard J 866:~~JUL2012~~ and SAE Standard J 2975:~~MAY2015~~DEC2013. SAE Standard J 866 – Friction Coefficient Identification and Environmental Marking System for Brake Linings (SAE J 866:~~JUL2012~~) provides details on the format, layout and definitions for the “unique identification code” and the environmental compliance markings. SAE Standard J 2975, Measurement of Copper and Other Elements in Brake Friction Materials (SAE J 2975:~~DECEMBER2013~~DEC2013) is the testing protocol to be used to prepare and analyze brake friction materials for cadmium and its compounds, chromium(VI) salts, lead and its compounds, mercury and its compounds, copper and its compounds, and asbestiform fibers.

**REASONABLE ALTERNATIVES CONSIDERED**

*Chosen Alternative*

Page 10, Second paragraph: As required under Health and Safety Code section 25250.60,

the proposed regulations were developed in consultation with the brake manufacturing industry to develop a workable program in California. These regulations reflect those efforts and the standards established in coordination with the State of Washington Department of Ecology and the Society of Automotive Engineers (SAE) International Brake Materials Environmental Task Force contained in SAE Standard J 866:JUL2012 and SAE Standard J 2975:~~MAY2015~~DEC2013.

## DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

### *Page 14, second paragraph:*

An automated search was conducted via Westlaw that yielded no conflicting state regulations using the following keywords: “brakes,” “brake pads,” “braking systems,” “copper,” “cadmium and brakes,” “lead and brakes,” “mercury and brakes,” “hexavalent chromium and brakes,” “asbestiform fibers and brakes,” and “asbestos and brakes.” An automated search was conducted via the electronic Code of Federal Regulations (eCFR) that yielded no conflicting federal regulations using the following keywords: “copper and brake and pads,” “lead and brake and pads,” “mercury and brake and pads,” “hexavalent chromium and brake and pads,” “asbestiform fibers and brake and pads,” “asbestos and brake and pads,” “brake and pads,” “braking systems,” and “vehicle and brakes and chemical content.”

## DETAILED STATEMENT OF REASONS: SUMMARY AND RATIONALE

*Section 66387.1(c)* defines “alternative testing method” to mean a chemical analysis testing method or chemical analysis sample processing method that is not cited in testing protocol SAE J 2975:~~DECEMBER2013~~DEC2013-, but has been demonstrated to be equivalent or better in accordance with 66387.6 (j) through (l) and approved by DTSC. This definition is necessary to provide clarity because alternative methods provide more access to new measurement techniques and greater flexibility in the selection of analytical methods, thereby reducing compliance costs while protecting public health.

*Section 66387.1(e)* defines “certification mark” to mean the packaging mark used to identify brake pads containing brake friction material that is compliant with Health and Safety Code sections 25250.51, 25205.51 and 25250.52, ~~and~~ or 25250.51 and 25250.53. The certification mark will alert consumers when a brake pad meets the permissible levels scheduled for January 1, 2014, 2014 and 2021, or 2014 and 2025. For example, as of January 1, 2014 brake pads exceeding 0.01% by weight of cadmium and its compounds, and 0.1% by weight of chromium and its compounds, lead and its compounds, mercury and its compounds, and asbestiform fibers may not be sold in California. On and after January 1, 2021 brake pads exceeding 5.0% by weight of copper and its compounds and the 2014 requirements may not be sold in California. And by January 1, 2025 brake pads exceeding 0.5% by weight of copper and its compounds and the 2014 requirements may not be sold in California. Various terms are associated with the marked proof of certification for brake pad products. This term is necessary to distinguish the marking intended only for the packaging.

*Section 66387.1(g)* defines “environmental compliance level” to mean the single letter

identified in section 66387.8 sections (b), (c), or (d). This term is necessary to provide clarity on the concentration levels associated with each demarcation found on brake friction materials using the letters "A", "B", or "N". This definition is necessary to clarify that the environmental compliance level is the single letter in last three characters of the edge code string with no additional alpha or numeric characters following it.

**Section 66387.1(gh)** defines "environmental compliance marking" to mean the three character alphanumeric identification code ~~specified in section 66387.8~~. This term is necessary to provide clarity on the significance of each of the demarcations found on brake friction materials. The environmental compliance marking is the environmental compliance level (with an "A," "B," or "N") followed by two digits indicating a year. The marking is intended to provide persons with an easy means to locate demarcation signifying environmental compliance. The letter indicates the content of various regulated constituents and their concentrations in a brake friction formulation and the numeric digits indicate the year the brake friction material was manufactured. This definition is necessary to clarify that the environmental compliance marking is the last three characters in the edge code string with no additional alpha or numeric characters following it.

**Section 66387.1(ij)** defines "marked proof of certification" to mean 1) the unique identification code plus the environmental compliance marking on the brake friction material, ~~or and 2) the a~~ certification mark that is required on the packaging for brake friction material products. This definition is necessary to make specific the type of demarcation that is necessary on packing, and on the brake pads to achieve compliance.

**Section 66387.1(fo)** defines "testing certification agency" or "registrar" to mean the same as defined in Health and Safety Code section 25250.50(g). As defined a "testing certification agency" or "registrar" is a third party 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. In the United States, many certification bodies that do not operate laboratories are recognized through the International Accreditation Forum. These certification bodies contract with testing laboratories accredited by a recognized International Laboratory Accreditation Council (ILAC) accreditation body. The industry term "registrar" is used in the United States for certification bodies performing registration or certification of manufacturers, suppliers, or other producers which are often not laboratories. A certification body may or may not be associated with a laboratory.

The phrase "industry-sponsored registrar" is also included in this definition since the terms "registrar" and "industry-sponsored registrar" are considered interchangeable. The term "industry-sponsored registrar" is used by the State of Washington to describe the organization that certifies and registers brake friction material formulations to meet the self-certification process outlined in their Better Brakes regulations. The "industry-sponsored registrar" is defined in section WAC 173-901-040(5) of the State of Washington Better Brakes regulations.

The responsibilities outlined in the proposed regulations for the "testing certification agency"

are more like the tasks associated with a “registrar” than an analytical laboratory. DTSC does not anticipate a “testing certification agency” to have an in-house analytical laboratory. A “testing certification agency” that contracts with analytical laboratories accredited by a recognized ILAC accreditation body is acceptable. However to be consistent with the California statute, the Department must use the term “testing certification agency” in the regulations. This term is necessary to clarify that “testing certification agency”, ~~and~~ “registrar”, and “industry-sponsored registrar” are synonymous.

**Section 66387.2(a)(8)** - SAE J 2975:DECEMBER2013, “Measurement of Copper and Other Elements in Brake Friction Materials,” dated December 2013. This document provides analytical laboratories, brake friction material manufacturers, and testing certification agencies access to the approved testing method.

This section is necessary because the statute requires DTSC to consult with the brake friction materials manufacturing industry in the development of all criteria for testing and marking of brake friction materials and adopting certification procedures for brake friction materials. This provision references the SAE International standard J 2975 as the industry standard for testing brake friction material. The DTSC Environmental Compliance Laboratory, the State of Washington environmental laboratory, and three other industry laboratories collaborated on the testing methodology and all agreed that SAE J 2975 is appropriate to verify compliance with the statute.

#### **66387.3 Self-certification of compliance**

This section is necessary to describe the scope and purpose of the self-certification procedures for brake friction materials under Health and Safety Code section 25250.60(a). Health and Safety Code section 25250.60 (a) states:

“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.” (Health & Safety Code section 25250.60 (a). emphasis added)

This section provides the details and the steps a manufacturer must take in order to self-certify that their brake friction materials comply with the statutory requirements for constituent concentrations.

The testing certification agency:

- Verifies the brake friction material is tested by an analytical laboratory accredited in accordance with California Code of Regulations, title 22, section 66387.5(a);
- Verifies the use of testing protocol SAE J 2975:DECEMBER2013~~DECEMBER2013~~ or an alternative testing method approved under section 66387.6, section (l); and
- Assigns the environmental compliance ~~marking level~~ and posts the unique identification code, the environmental compliance level, marked proof of certification and self-certification documentation on their website.

Certification is the process of publicly attesting that a specified-standard has been achieved.

This formal procedure can be used to assess and verify a level of quality, standard, attribute, characteristic, or qualification in regards to the status of individuals or organizations, goods or services, procedures, or processes, in accordance with established requirements or standards. Because the term “certification” is used for several different activities, it is necessary to provide more clarity on the term “self-certification.”

Manufacturers are not required to retest brake friction material formulations registered with NSF International prior to the effective date of these regulations or relabel properly marked packaging if the brake friction material is compliant with the self-certification requirements in section 66387.3 and the marked proof of certification requirements described in section 66387.7. On and after the effective date of these regulations, manufacturers shall test their brake friction material formulations using the test method specified on the regulations.

**Section 66387.3(a)** makes clear the self-certification requirements will ensure the brake friction material ~~manufacturers~~ meet either Health and Safety Code sections 25250.51; 25250.51 and 25250.52; ~~and~~ 25250.51 and 25250.53. The self-certification process outlined in subsections of 66387.3 is a registration process where the brake friction material manufacturer registers their brake friction material with the testing certification agency. The testing certification agency verifies the brake friction material is tested by an analytical laboratory accredited in accordance with section 66387.5 and is analyzed using testing protocol outlined in section 66387.6. The testing certification agency then assigns the environmental compliance marking and posts the marked proof of certification and self-certification documentation on their website. The self-certification process has been harmonized with the State of Washington Better Brakes regulations and reflects the current process in place to certify brake friction material. The self-certification process in 66387.3 is necessary because it reduces duplication and ensures consistency between the two states on key steps of the self-certification process.

Figure 1 illustrates the self-certification process.

**Section 66387.3(a)(3)** makes it clear that the manufacturer verifies that the brake friction material is assigned an unique identification code ending in the appropriate environmental compliance marking. This provision ensures that brake friction material products can be traced back to a manufacturer by providing a code for both the manufacturer and a code for the formulation. A manufacturer may also choose to use multiple unique identification codes for the same formulation if necessitated by business agreements or to distinguish different brand names for products.

The manufacturer is also required to include an environmental compliance marking based on the known composition of the brake friction material and the year the material was manufactured. Because the restrictions on copper are phased in, it is important to indicate on the brake friction material whether the material meets the 2014 requirements (marked with an “A”), the 2014 and 2021 requirements (marked with a “B”), or the 2014 and 2025 requirements (marked with an “N”). The year of manufacture will indicate when the formulation was produced. For example, an environmental compliance marking of N15 means the brake friction material meets the 2014 and 2025 standards and was manufactured in 2015.

**Section 66387.3(a)(4)(B)** sets out a certification statement that must be included and signed for self-certification documentation. This certification statement is necessary because it ensures all self-certifications are accurate, and brake friction materials bearing the listed unique identification codes are of the same composition as the samples submitted to the laboratory. By signing the certification, a manufacturer confirms the following:

- Certifies as true and accurate all information in the submittal;
- Asserts that the brake friction materials bearing the marked proof of certifications in this self-certification document are substantially identical to the products submitted for testing;
- Asserts that the brake friction material meets the requirements of all applicable laws and authorizes the testing certification agency to publicly post all information required to be made public;
- Asserts that all test results used to issue this self-certification comply with all requirements of the regulations and statute;
- Agrees that the testing certification agency will have no liability to the manufacturer with respect to release of the testing data to any government agency with the legal authority to receive such data; and
- Asserts the individual signing the self-certification document has the authority to make this assertion on behalf of the manufacturer.

This subsection is necessary to comply with the statutory requirement of Health and Safety Code sections 25250.60 subdivision (c), subdivision (e), and subdivision (g). The certification statement serves as proof of self-certification as required by statute. The provision allows DTSC to review any changes to the affidavit language and confirm required language listed in section 666387.3(a)(4)(B) is not removed.

**Section 66387.3(a)(5)(B)**. The testing certification agency must include the manufacturer's name, the unique identification code, and the full URL address to the certification document on the publicly accessible and searchable database or list. This section is necessary to assure that DTSC has all the information needed to monitor the implementation of the regulations and to enforce against manufacturers that are not in compliance.

**Section 66387.3(b)** allows the manufacturers to use one set of testing results and self-certification documentation, and a single unique identification code for multiple products using an identical brake friction material formulation. There are numerous types of brake pads, depending on the intended use and type of vehicle. A single brake friction material may be used for many different brake pad configurations and may be produced for different retailers or vehicle manufacturers. The laboratory testing results used for the self-certification are linked to a specific formulation and its composition. This provision is necessary because it makes it clear that only the formulation needs to be tested and the results can be used for any number of brake pad products using the same formulation.

**Section 66387.3(c)** allows the manufacturer to use one set of testing results derived from a

single sample of brake friction material that represents one brake friction formulation. To obtain a representative sample for the brake friction material formulation, at least three samples should be tested per brake friction material formulation.

In the regulations, “one set of testing results” refers to the test results derived from a single sample of brake friction material that represents one brake friction material formulation. To obtain a representative sample for the brake friction material formulation, at least three samples should be tested per brake friction material formulation. This “one set of testing results” refers to the testing results carried out to satisfy the requirements in section 66387.3(a). The “one set of testing results” does not include testing results from experimental formulations, conformity of production audits, incorrectly manufactured products, or previous certification cycles.

This provision is necessary because it makes it clear that only the formulation needs to be tested and the results can be used for any number of brake pad products using the same formulation. This section also makes it clear the “one set of testing results” refers to the testing results used to satisfy the self-certification requirements in section 66387.3(a).

**Section 66387.3(d).** This provision puts the responsibility of the accuracy of all information transmitted to the testing certification agency on the manufacturer of brake friction material. This provision is necessary because the self-certification process involves multiple entities. It ensures that accurate information is transmitted to the testing certification agency by the brake friction material manufacturer.

DTSC’s ability to implement the directives of Health and Safety Code sections 25250.51, 25250.52, and 25250.53 requires that DTSC be able to compel and enforce compliance with the requirements of these regulations.

#### ***66387.4 Testing Certification Agencies for brake friction materials***

##### ***Page 34, last paragraph:***

As discussed in the FLSOR section 66387.1(n), the responsibilities outlined in the proposed regulations for the “testing certification agency” are more like the tasks associated with a “registrar” than an analytical laboratory. There are many certification bodies in the United States (U.S.) that do not operate a testing laboratory. DTSC does not require a “testing certification agency” to have in-house analytical laboratory. A “testing certification agency” that contracts with analytical testing laboratories accredited by a recognized ILAC accreditation body is acceptable.

##### ***Page 35, first and second paragraph:***

However, to be consistent with the California statute, the department must use the term “testing certification agency” in the regulations. To clarify the department’s interpretation of the term, a sentence was added to the regulatory definition stating, “The term ‘registrar’ and ‘industry-sponsored registrar’ are used by the industry when referring to this entity.” for clarification.

The industry term “registrar” is used in the U.S. for certification bodies performing registration or certification of products or manufacturers. This introduction makes clear that the “testing certification agency” principally serves as the registrar and provides lists of products that have been certified and are registered with the organization as fully conformant to one or more product standards in accordance with HSC sections 25250.51, 25250.51 and 25250.52, or 25250.51 and 25250.53.

**Section 66387.4 (a)(1)** makes it clear the testing certification agencies use data from an accredited laboratory in accordance with section 66387.5 or from a laboratory with an alternative accreditation that has obtained approval from DTSC prior to using testing results from that analytical laboratory for the brake friction material. This section is necessary because accredited laboratories will help ensure the competency of the testing laboratory and their testing data results.

**Section 66387.4 (a)(3)** makes it clear the testing certification agency issues a “self-certification of compliance” and unique identification codes to the brake friction material manufacturer whenever their formulation(s) complies with Health and Safety Code sections 25250.51, 25250.51 and 25250.52, or 25250.51 and 25250.53. This is necessary to comply with Health and Safety Code section 25250.60(h) and to provide a certification as proof of compliance.

**Section 66387.4 (a)(5)** makes it clear the testing certification agency assigns the environmental compliance ~~marking level~~ on the basis of the analytical testing done in accordance with section 66387.6 and in a format that conforms to section 66387.7(c)(3). This is necessary because the environmental compliance ~~code marking~~ is confirmation that the brake friction material is in compliance with the statute. The testing certification agency will be the only other entity besides the manufacturer with access to the testing results. This provision imposes the responsibility on the testing certification agency to publicly attest that the brake friction material standard has been achieved.

**Section 66387.4 (a)(6)** makes it clear the testing certification agency posts on the Internet the self-certification document that includes the ~~marked proof of certification~~ environmental compliance level and unique identification code as marked on the brake friction material. The material must be marked with the unique identification code, ~~and~~ the environmental compliance ~~marking level~~, and ~~with or without~~ the two digits that indicate the year the brake friction material is produced. By allowing the environmental compliance ~~marking level~~ to be posted without the year for the self-certification document, the posting for each compliant brake formulation will only be posted once compared to multiple listings for each self-certification. The self-certification is valid over multiple years for a given environmental compliance ~~mark level~~ and the link to the self-certification document provides the effective dates for each environmental compliance ~~mark level~~. For example, if the self-certification for a specific formulation is only valid 11/2017 through 10/2020 and the posting includes year of manufacture, the listing of the self-certification on the Internet would have to list the certified brake friction material as:

- XYZ formula 3 (may include additional optional codes) A17;

- XYZ formula 3 (may include additional optional codes) A18;
- XYZ formula 3 (may include additional optional codes) A19; and
- XYZ formula 3 (may include additional optional codes) A20.

This provision is necessary because it provides the testing certification agency flexibility by allowing one self-certification document to cover multiple listings for the same formulation. In the example above, this allows the certification for the formulation to be posted as XYZ formula 3 with a link to the actual certification document which would include the appropriate date of effectiveness. If a certification is no longer valid, the expired certification is deleted from the Internet so that only current certifications are posted.

**Section 66387.4 (b)(2)(C)2** makes it clear the testing certification agency provides a copy of the quality assurance procedures for checking testing results and rejecting testing results that are not within the quality control limits. Since DTSC will not be able to review or audit the analytical test results, this section is necessary to allow DTSC to review the quality assurance procedures used by the testing certification agency to ensure their evaluation of the analytical test results will identify brake friction materials that comply with the requirements of Health and Safety Code sections 25250.51, 25250.51 and 25250.52, or 25250.51 and 25250.53.

**Section 66387.4 (b)(2)(C)6** makes it clear the testing certification agency provides a copy of the proposed format for the “marked proof of certification.” This includes both the marked proof on the brake friction material and the certification mark on the product packaging. This is necessary to assure DTSC that the testing certification agency uses the SAE J 866 marking standards and to notify DTSC if a packaging logo besides the AASA’s LeafmarkLeafMark™ is to be used.

**Section 66387.4 (b)(2)(C)8** makes it clear the testing certification agency provides assurance that an Internet address has been established where all self-certification documentations will be published. Furthermore, there cannot be any cost to the public to access this information. This is necessary to allow consumers and retailers purchasing brake friction material to easily verify compliance using the marked proof of certification. This will be especially critical for California retailers to identify compliant brake friction materials prior to sale or installation.

**Section 66387.4 (b)(2)(D)** makes it clear the testing certification agency provides a copy of the certification credentials for the chemical analysis laboratory(ies) used by the testing certification agency. These laboratories will be used by the brake friction material manufacturers to comply with these requirements. This section is necessary for DTSC to verify the certification credentials of the laboratories that will be used as part of the approval process for the certification requirements used by the testing certification agency. It is necessary for DTSC to verify that a laboratory used by the testing certification agency is qualified and equipped for testing products in accordance with SAE J 2975: ~~DECEMBER 2013~~ DEC2013 and comply with requirements of section 66387.5.

**Section 66387.4 (c)** makes it clear that DTSC shall notify the organization submitting the request in writing of its determination of approval or denial within 90 days of receipt of the request.

Any certification requirements approved by the department for an organization wishing to be a testing certification agency shall be posted on DTSC's web page. If DTSC denies the request, the organization submitting the request will be given the reasons why their certification requirements were not approved.

This section is necessary because DTSC must make timely decisions regarding the certification requirements used by the testing certification agency so that businesses can proceed with minimal interruptions to getting their brake friction material registered with an appropriate testing certification agency.

Section 66387.4(c) also does not require an approved testing certification agency to resubmit documentation in accordance with section 66387.4(b)(2)(D) for additional laboratories to be used as long as these additional analytical laboratories comply with the requirements in section 66387.5(c)(2). This provision will allow testing certification agencies the flexibility to add laboratories and meet market demands so long as the laboratories comply with the accredited requirements in section 66387.5. This provision will also allow testing certification agencies the flexibility to make changes to documentation and procedures so long as the changed documents comply with all the requirements in section 66387.4. In exchange for this flexibility, the Department may request a copy of the testing certification agency's certification requirements to confirm the certification requirements comply with section 66387.4. This section is necessary because it will reduce the reporting burden for testing certification agencies that have been approved by DTSC, ~~and~~ allow for timely additions of laboratories to address needed testing capacity, and allow documents to be revised due to staff changes or editorial changes to procedural documents.

#### ***66387.5 Accredited laboratories for testing brake friction materials***

**Section 66387.5 (a)** sets out the accreditation standard that the analytical laboratory needs to ensure testing results can accurately demonstrate compliance with the statute (HSC §§ 25250.51, 25250.52, and 25250.53). Laboratory accreditation is a process using criteria and procedures specifically developed as a means of determining technical competence.

For the purposes of these regulations, DTSC has determined that the laboratory accreditation must meet either ISO/IEC 17025 or the National Environmental Laboratory Accreditation Program (NELAP) standard. ISO/IEC 17025 is an internationally accepted standard for laboratory accreditation; while, NELAP is the national accreditation program for environmental laboratories. ISO/IEC 17025 is a general standard for analytical laboratories so it is necessary to specify the requirement that the scope of competency must include SAE J 2975: ~~DECEMBER 2013~~ DEC 2013 as the testing methodology to be certified. NELAP includes sample preparation and test methods identified in SAE J 2975: ~~DECEMBER 2013~~ DEC 2013.

These laboratory accreditation standards are necessary to assess factors relevant to a laboratory's ability to produce precise, accurate test and calibration data in accordance to the testing methodology specified in SAE J 2975: ~~DECEMBER 2013~~ DEC 2013. See ~~ISORFSOR~~ section 66387.2(a)(4) for a further discussion of the ISO/IEC 17025 standard and ~~ISORFSOR~~ section

66387.2(a)(6) for NELAP accreditation.

[Section 66387.6\(a\)](#) is necessary because it makes it clear the manufacturer is responsible for having their brake friction materials tested by a laboratory accredited in accordance with section 66387.5 using the testing protocol SAE J 2975.

The State of Washington has approved the use of SAE J 2975:2013 for testing brake friction material for compliance under the Better Brakes law. Brake friction material manufacturers are not required to retest their brake friction material formulations registered with NSF International prior to the effective date of these regulations. On and after the effective date of these regulations, manufacturers shall test their brake friction material formulations using the test method specified in the regulations.

[Section 66387.6\(e\)\(1\)](#) makes it clear the testing for the regulated constituents is done at least in triplicate. Testing introduces additional variability or analytical uncertainty in the testing data results and may result in the need for additional testing.

A statistical quantity includes an average or mean, a variance and an assumption of the distributional models, e.g., normal, lognormal, etc. Because testing will involve only a few samples, 100% certainty cannot be achieved, so it is necessary to define an acceptable uncertainty of the testing results. For the average, the lower and upper limits of a confidence interval will define the most probable concentration range within which the true average lies based on the acceptable uncertainty determined by the manufacturer. Defining the average and other statistical parameters is important to achieving fulfillment of the condition for the formulation to be below the specified concentrations for each restricted constituent stated in statute. This section is necessary because it instructs the brake friction material manufacturers and analytical laboratory on the method to address variability due to the heterogeneous nature of the brake friction material.

The language regarding triplicate sampling is similar to the language in section WAC 173-901-080(4) of the State of Washington Better Brake regulations.

[Section 66387.6\(e\)\(2\)](#) extends triplicate testing to any approved alternative testing method or protocol if used. See the discussion above on the use of sample averages of triplicates to demonstrate compliance. This section is necessary for clarity to ensure the method used for sample averages are consistent for SAE J 2975:DECEMBER2013/DEC2013 and the alternative method.

[Section 66387.6\(g\)\(1\)](#) is necessary because it clarifies that test results due to laboratory error as specified in section 66387.6(h) do not have to be reported to the testing certification agency. The section also clarifies that all test results derived from a single set of brake friction material samples must be reported to the testing certification agency at the same time on a single report.

[Section 66387.6\(g\)\(1\)\(A\)](#) is necessary because it clarifies that any reporting that does not meet the requirements of 66387.6(g)(1) would be considered a modification to the test method in

66387.6(a)(2) and would require approval under 66387.6(k) prior to using the report for self-certification.

Section 66387.6(g)(12) is necessary because it clarifies that the testing reports transmitted from the laboratory to the testing certification agency must include the minimum information specified in SAE J 2975: ~~DECEMBER 2013~~ DEC2013 to stay compliant with the testing procedure.

If an alternate method of testing is approved, the test reports transmitted from the laboratory to the testing certification agency must include the minimum information specified in the alternate method of testing utilized.

Laboratory reports will include 1) general information identifying themselves, their client, and the sample type and matrix; 2) preparation and analysis methods, detection limits, and results; 3) dates of sample receipt, sample preparation, and analysis; 4) the quality assurance/quality control sample results; and 5) comments or notes.

Section 66387.6(g)(23) makes it clear the testing laboratory compares ~~and reports if the~~ cumulative average for each regulated constituent and copper does not exceed the specified concentrations listed in the statute and specifies the environmental compliance level in their laboratory report. The concentration limits set in statute are restated in this section to facilitate compliance by having all the information listed in one document. This section also makes it clear that the laboratory is responsible to confirm and document that the testing results do not exceed the concentrations listed in statute when they report testing results to the manufacturers.

Section 66387.6(h)(1) is necessary because it clarifies that laboratory error may include incorrect samples being initially submitted to the testing laboratory for testing.

Section 66387.6(h)(2) is necessary because it clarifies the process for reporting laboratory error and the subsequent action to be taken. A testing laboratory shall contact the testing certification agency when it determines test results submitted were laboratory error within four (4) calendar days of the determination. The testing certification agency shall withdraw registration of the specific unique identification codes until such time as new testing without laboratory error is provided to the testing certification agency which warrants the unique identification codes being properly registered.

Section 66387.6(i) makes it clear a brake friction material manufacturer retains copies of laboratory testing results used for self-certification for a period of at least ten (10) years after the date of certification. It is desirable that testing records should be retained as long as the formulation continues to be in use in the market. The language in this section is similar to the language in WAC 173-901-080(7) of the State of Washington Better Brakes regulations. This section is necessary because many brake friction materials will be available on the market or in use for many years and these documents preserve the testing results, even if the self-certification is no longer valid.

**Section 66387.6(j)(3)** disallows any proposed alternative testing method to modify the sample preparation method outlined in SAE J 2975:~~DECEMBER2013~~DEC2013 section 4.1. The SAE J 2975 sample preparation method includes detailed instructions as to the use of a drill press, drill plunge rates, drill spindle speed, drill press stop depth, type of drill bit, and number of borings needed, the collection method, and the preferred morphology of the drillings. Industry collaborated with the State of Washington and California to establish this preparation method. Due to the heterogeneity of brake friction material, this section is necessary to ensure that the morphology of the drilling and the number of borings result in an acceptable measurement variation of the chemical content of the material. The criterion in SAE J 2975 also specifies the acceptable standard deviation for the triplicate measurement to ensure good representation of the chemical composition of the material.

**Section 66387.6(k)(3)** makes it clear a copy of the SOP for the alternative testing method is submitted to the Department. The SOP identifies the test method (method number or reference, analyte name or analyte group); the scope and application (objective, matrices, practical analytical range); and a summary of the method. NELAC standards apply to federal and state mandated testing for all environmental laws. This section is necessary because the DTSC laboratory will be relied upon to evaluate proposed alternative testing methods for equivalence to SAE J 2975:~~DECEMBER2013~~DEC2013 and also perform future confirmation sampling for compliance purposes.

The provision also requires either a demonstration of capability (DOC) package or a validation package as outlined in the NELAC Institute Standard, Module 4: Quality Systems for Chemical Testing. It is very important that the scope of the test method be clearly defined and shown to be accurate and repeatable through validation. According to NELAC, validation is the confirmation by examination and the provision of objective evidence that the particular requirements for a specific intended use are fulfilled. A demonstration of capability document requires that the laboratory explicitly define what constitutes an initial demonstration of capability for each test and method the laboratory performs. Each of the methods used to analyze compliance samples must have this document completed for them by each analyst who will conduct that analysis.

**Section 66387.6(k)(4)** makes it clear a certificate signed by the director (laboratory director) of the laboratory that performed the proposed alternative testing method(s) can attest that the alternative method is equivalent or better than SAE J 2975:~~DECEMBER2013~~DEC2013; and suitable for analyzing the restricted constituents identified in the statute. This section is necessary because the requestor must assure the department that the alternate testing method is equivalent or superior to SAE J 2975.

#### **66387.7 Marked proof of certification**

##### **Page 51, last paragraph:**

The department added language to allow the marked proof of certification to be a two-part marking system. One part of the marking system is the certification mark which is a packaging logo. The other part is an alphanumeric code comprised of the unique

identification code and environmental compliance marking placed directly on the brake friction material. During the pre-APA process, stakeholders requested a packaging logo to be included as part of the marked proof of certification. In response to this request, DTSC added language to include a packaging logo that is consistent with the logo used in the State of Washington. This packaging logo allows the public and retail businesses a quick and easy way to identify parts certified as compliant with HSC section 25250.51, 25250.51 and 25250.52, ~~and~~ or 25250.51 and 25250.53. Incorporating the packaging logo as part of the marked proof of certification is considered part of “adopting certification procedures for brake friction materials” under HSC section 25250.60(a). Figure 2 provides an example of the two types of markings described in section 66387.7 of the “marked proof of certification.”

***Page 52, after Figure 2:***

The certification mark is part of the certification requirements submitted by the testing certification agency when obtaining the Department’s approval of their certification requirements per section 66387.4(b)(2)(C)9. Presently, the Department recognizes and accepts the AASA LeafMark™ as a certification mark issued by the testing certification agency, NSF International, as part of their certification requirements. The regulations do not require a manufacturer to specifically use the LeafMark™. However, the regulations do require the manufacturer to use a certification mark that is issued by a testing certification agency. Testing certification agencies must submit their certification requirements which include the certification mark to the Department for approval. Once these regulations become effective, the Department expects the current testing certification agency to submit their certification requirements for approval.

***Section 66387.7(a)*** clarifies the marked proof of certification is the unique identification code and environmental compliance marking that is marked on the brake friction material, described in SAE J 866:JUL2012, and the certification mark that appears on the brake friction material packaging. These certification marks provide proof that the brake friction material meets the requirements of the statute (HSC §§ 25250.51, 25250.51 and 25250.52 or 25250.51 and 25250.53).

For packaging, the marked proof of certification is a logo that serves to notify end users that the product is compliant with the statute. The package logo makes it easier to locate the marked proof of certification without the need to open individual packages. Furthermore, a logo is a visual cue that provides the essential information about the compliance of the products with the statute by indicating the concentrations of various regulated constituents and copper in brake friction materials. For example, the Motor and Equipment Manufacturers Association owns the following AASA’s ~~Leafmark~~LeafMark™ certification mark for packaging shown in Table 2.

Table 1. AASA's LeafmarkLeafMark™ Certification Mark

		
<p>Indicates levels of:  asbestos below 0.1%;  cadmium below 0.01%;  chromium below 0.1%;  lead below 0.1%; and  mercury below 0.1%.</p>	<p>Indicates levels of  asbestos below 0.1%;  cadmium below 0.01%;  chromium below 0.1%;  lead below 0.1%;  mercury below 0.1%; and  copper below 5.0%.</p>	<p>Indicates levels of  asbestos below 0.1%;  cadmium below 0.01%;  chromium below 0.1%;  lead below 0.1%;  mercury below 0.1%; and  copper below 0.5%.</p>

For brake friction material, the marked proof of certification mark is comprised of the unique identification code and environmental compliance marking. This alphanumeric code identifies the manufacturer and a specific formulation and links to laboratory testing results and self-certification documentation for each formulation on the testing certification agency's website. See Figure 2 for an example. This section is necessary because it instructs the brake friction material manufacturers on the marking convention used for the marked proof of certification and the need for a packaging logo.

The section also makes it clear that DTSC will post the certification markings issued by the testing certification agency on the Department's website. Although, the self-certification documents will be available on the testing certification agency website, it is important for stakeholders to find the certification markings ~~found on~~ for brake friction material on our public website. This should increase the accessibility of this information to all stakeholders, especially small businesses and consumers that are looking for verification of compliance.

**Section 66387.7(b)** makes it clear that the marked proof of certification cannot be retroactively required. The statute to limit the regulated constituents<sup>18</sup> took effect on January 1, 2014. California, however, did not have these regulations in place to require a specific marking procedure. Brake friction materials that were tested, certified, and assigned environmental compliance markings prior to the effective date of these regulations and meet the requirements of section 66387.8(b), (c), or (d) by NSF International are considered compliant with these regulations. Brake friction material packaging marked with a certification mark issued by NSF International are also considered to be compliant with the certification mark requirements described in section 66387.7(b), (c) and (d). It is necessary to clarify that the effective date of this marking process is upon adoption of these regulations.

**Section 66387.7(d)(5)** makes it clear the manufacturer marks brake friction material packaging with a certification mark that is issued by an approved testing certification agency. This section

is necessary because the packaging must be marked with an approved packaging logo to allow the public and retail businesses a quick and easy way to identify parts certified as compliant with HSC section 25250.51, 25250.51 and 25250.52, or 25250.51 and 25250.53.

#### **66387.8 Environmental Compliance MarkingLevel**

This section defines the environmental compliance ~~markings-levels~~ "A," "B" and "N" that corresponds to the restrictions in Health and Safety Code sections 25250.51, 25250.51 and 25250.52, and 25250.51 and 25250.53. The environmental compliance ~~marking-level~~ is part of the marked proof of certification defined in section 66387.7.

DTSC had several discussions with industry stakeholders regarding environmental compliance ~~markings-levels~~ associated with exempted brake friction materials under HSC section 25250.55 and specifically Health and Safety Codes 25250.55(g), (h), and (i). DTSC decided not to include language regarding an exemption mark in this section. When SAE J 866:JUL2012 was modified, the standard did not list an environmental compliance ~~marking level~~ for exempt materials since California Health and Safety Code section 25250.55 and the State of Washington statute varied in this area. DTSC cannot adopt the State of Washington exemptions since that is outside the Department's authority. ~~This issue was addressed in the DTSC Responses to Comments on the Informal Draft Regulations dated October 3, 2014.~~ Figure 3 illustrates the differences on exemptions between the two statutes. As part of the pre-APA discussions, the Department stated a manufacturer may use an exemption mark specified by another state if that mark was placed in a location identified as optional under SAE J866:2012. To formalize this decision, the regulations were revised to include a section instructing manufacturers on the marking option for these materials.

**Section 66387.8(a)** explains the environmental compliance ~~marking-level~~ is the last letter marked on brake friction materials followed by the two digit year of manufacture. It must be an "A," "B," or "N" and it allows a person to determine the level of environmental compliance of the brake friction material. The environmental compliance ~~marking-level~~ is part of the marked proof of certification for brake friction material. This section is necessary because this code describes the compliance level associated with the various compliance requirements in the statute. The "A," "B," or "N" indicates the content of copper and the regulated constituents, along with their concentrations in a brake friction formulation. Brake friction material marked with an "A," "B," or "N" indicates compliance with HSC sections 25250.51, 25250.51 and 25250.52, or 25250.51 and 25250.53, respectively. It is necessary to also indicate the year of manufacture to determine compliance. All of the following subsections were included for the convenience of the reader.

**Section 66387.8(b)** is necessary for clarity because it explains an environmental compliance ~~marking-level~~ "A" indicates that the manufacturer has submitted self-certification documentation showing the brake friction material does not contain any of the following regulated constituents in amounts exceeding the specified concentrations:

- (1) Asbestiform fibers, 0.1% by weight;

- (2) Cadmium and its compounds, 0.01% by weight;
- (3) Chromium (VI)-salts, 0.1% by weight;
- (4) Lead and its compounds, 0.1% by weight; and
- (5) Mercury and its compounds, 0.1% by weight.

**Section 66387.8(c)** is necessary for clarity because it explains the environmental compliance ~~marking-level~~ "B" indicates that the manufacturer has submitted self-certification documentation showing the brake friction material does not contain any of the constituents listed in subsection (b) of this section in amounts exceeding the specified concentrations and that the brake friction material contains between 0.5 and 5.0% (inclusive) copper by weight.

**Section 66387.8(d)** is necessary for clarity because it explains that an environmental compliance ~~marking-level~~ "N" indicates that the manufacturer has submitted self-certification documentation showing the brake friction material does not contain any of the constituents listed in subsection (b) of this section in amounts exceeding the specified concentrations and that the brake friction material contains less than 0.5% copper by weight.

**Section 66387.8(e)** is necessary because it clarifies how a brake friction material manufacturer marks brake friction material that is exempt in other states. The section allows a brake friction material manufacturer to include additional information in an optional field of the certification marking format specified under SAE J866:JUL2012.

#### **66387.9 Extension Process**

##### **Page 59, third paragraph:**

The Brake Friction Material statute allows any manufacturer to apply to DTSC for an extension for the January 1, ~~2015~~2025 deadline to limit copper in brake friction material to less than 0.5%.<sup>1</sup> The manufacturer for the purpose of an extension includes all of the following:

**Section 66387.9(d)** clarifies the authorizing statute mandates that DTSC assess a fee for each application sufficient to cover actual costs incurred in implementing an extension in accordance with the statute. This section is necessary for clarity because it provides the reader with a list of activities associated with processing an extension upon which the fee will be based. Under ~~ISORFSOR~~ sections 66387.9(d)(1) - (7) below, a more detailed discussion of the costs associated with each activity is provided. Most, if not all, of the following costs are for activities required by the statute.

#### **LOCAL MANDATE DETERMINATION**

The proposed regulations do not impose any mandate on local agencies or school districts.

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<sup>1</sup> HSC § 25250.54

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**SUMMARY AND RESPONSE TO COMMENTS RECEIVED DURING THE INITIAL NOTICE PERIOD  
APRIL 8, 2016 THROUGH MAY 23, 2016.**

<b>COMMENTS NUMBER</b>	<b>COMMENTS NAME</b>	<b>AFFILIATION</b>
1	Aaron Lowe	Auto Care Association
2	Kevin Wolford	AMECA
3	Jill Bicknell	California Stormwater Quality Association
4	Gerhardt Hubner	California Stormwater Quality Association
5	James Scanlin	Alameda Countywide Clean Water Program (Clean Water Program)
6	Andria Ventura Rita Kampalath Leslies Mintz Tamminen J. Stacey Sullivan	Clean Water Action Heal the Bay Seventh Generation Advisors Sustainable Conservation
7	Julias Rege Stacy Tatman	Association of Global Automakers Alliance of Automobile Manufacturers
8	Ann Wilson	Motor & Equipment Manufacturers Association (MEMA)
9	Lawrence(David) Schenk	NSF International
10	Susan Hazen	Self

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May 23, 2016

Ms. Jackie Buttle  
Regulations Coordinator  
Office of Planning & Environmental Analysis  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, CA 95812-0806

RE: Hazardous Materials: Motor Vehicle Brake Friction Material, R-2014-01, Z-2016-0329-04

Dear Ms. Buttle:

On behalf of the more than 500,000 businesses in the auto care industry, the Auto Care Association (the "Association") appreciates the opportunity to comment on the proposed regulatory text for the reduction of certain friction-related materials in motor vehicle brakes. This law and subsequent regulation will dramatically affect the production of motor vehicle brakes in the future and it is critical that manufacturers, distributors, retailers, and professional service technicians have clear guidelines for the implementation of this law.

**Background**

The Auto Care Association is the voice of the \$300 billion plus auto care industry. We provide advocacy, educational, networking, technology, market intelligence and communications resources to serve the collective interests of our members. Replacement brake parts for motor vehicles continue to be the top selling items in the auto care industry. Therefore, this regulation is vital moving forward.

The draft regulatory text outlines many of the central points agreed upon by the Department of Toxic Substance Control (DTSC) and the motor vehicle industry. However, while it is clear how manufacturers should proceed with compliance measures, the text omits a central priority outlined in the law relative to the availability of replacement brakes for legacy vehicles. Therefore, the draft should be revised to include a section emphasizing a section within the law that provides for exemptions for certain brakes that may be sold in the state of California.

**Parts Exemption Clarification**

The Association needs the regulatory text to include language making it clear that sections 25250.55 (g) and (h) of the public law will apply to DTSC's enforcement of the motor vehicle

Comment #1

brake friction material law. These sections outline limited exemptions for certain brake friction materials manufactured by both original equipment suppliers and aftermarket manufacturers. The law was explicit in exempting brake friction materials that apply to vehicles manufactured prior to 2021 for the 2021 provision and again for vehicles manufactured prior to 2025 for the 2025 provision. Therefore, DTSC should be equally as explicit in its regulatory text regarding enforcement of this portion of the law.

Comment #1

### **Reasoning**

The exemptions outlined in the law are critical for the continued safety of drivers operating vehicles manufactured prior to both 2021 and 2025. The millions of vehicles on the roads in California are currently operating using brake systems built and designed to function with brake friction materials that meet the laws in place at the time the vehicles were manufactured. Those brake systems require replacement brake parts that meet those same standards in order to maintain proper functionality, reduce brake system failures, and ensure safe stopping.

The current average age of a vehicle on the road has reached nearly 12 years since its original manufacture release. Therefore, a vehicle built in 2016 will most likely still be in operation long after brake friction standards for the 2021 and even 2025 go into effect. In order to keep those vehicles functioning safely, DTSC must make it clear that the proper replacement brake parts will continue to be available for those legacy applications.

Section 25250.55 of the California statute that authorized this rulemaking was clear that brakes manufactured for pre-2021 and 2025 vehicles should continue to be available at the same time that the new brake material is being sold for later model vehicles. By adding in language to the regulatory draft outlining the exemptions required by law, DTSC will be making it clear that it wants to avoid any adverse public safety effects caused by their enforcement of the brake friction material law.

### **Conclusion**

We appreciate DTSC working closely with the auto care industry on this law and subsequent regulatory text. As an extension of those efforts, the Auto Care Association, along with the auto manufacturers, Motor Equipment Manufacturers Association, and various State bodies, have entered into a memorandum of understanding with the Environmental Protection Agency to expand the brake friction material laws from both Washington State and California to the rest of the country. In order to maintain consistency in that practice, it is important that the California regulatory text reiterate the limited exemption provided in the law.

Thank you again for the opportunity to comment on the proposed regulatory text outlining the necessary compliance measures for brake friction material manufacturers. If DTSC has any questions regarding our comments, please contact Sheila Andrews at 301-654-6664.

As brake manufacturers work to the develop alternative brake friction materials, however, vehicles manufactured prior to 2021 and again in 2025 will need to continue to be built with brake systems that meet existing friction material laws.

Sincerely,

A handwritten signature in black ink that reads "Aaron Lowe". The signature is written in a cursive style with a large, sweeping initial 'A'.

Aaron Lowe  
Senior Vice President, Government and Regulatory Affairs

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Automotive Manufacturers  
Equipment Compliance Agency, Inc.

1025 Connecticut Ave. N.W. ☒ Suite 1012☒ Washington D.C. 20036



20 May 2016

Ms. Jackie Buttle, Regulations Coordinator  
Office of Planning & Environmental Analysis  
Department of Toxic Substances Control  
Department Reference Number: R-2014-01  
P.O. Box 806  
Sacramento, CA 95812-0806

Dear Ms. Buttle,

We applaud the efforts of State of California and the Department of Toxic Substances Control to protect the environment and are grateful for the opportunity to comment on this process. The Automotive Manufacturers Equipment Compliance Agency, Inc. (AMECA) currently administrates the Equipment Compliance Program initiated by the American Association of Administrators (AAMVA) in 1967. This program was started at the request of manufacturers to provide one stop for all state regulatory needs. We have all existing documentation, including company records, back to 1967. It was only in 2013 when the State of Washington adopted a different data standard for brake friction material that any other registration program existed.

AMECA currently has agreements with 24 states in the United States to provide equipment registration services. In addition, our documents are currently used by Republic of Ecuador and have been previously used by the State of Israel and Bolivarian Republic of Venezuela as proof of products meeting minimum safety standards.

AMECA is not a signatory to ISO-17065 because, as agent for state governments, we can only ask for what state governments require to protect human safety. Since the federal government does not require ISO certification on safety products, state governments cannot require ISO certification on safety products and therefore AMECA cannot offer this service as part of state regulations. We are working on becoming an ISO-17065 certification agency as a supplemental service for another industry.

We believe that the California regulation CCR Title 22, Division 4.5, Chapter 35, Article 1, sections 66387.1 to 66387.9 needs to be harmonized with the Washington Better Brakes Rule Chapter 173-901 WAC. Because Washington does not require ISO 17065 certification, California's adoption of a mandatory ISO process for the Testing Certification Agency will result in 3 systems of registration in the United States. The AMECA program for friction registration in regards to human safety, the Washington program and California's program requiring ISO certification. Alternatively the California could enter into a reciprocity agreement with Washington on the reporting and marking requirements.

Comment #1

The requirement for ISO 17065 certification for a manufactured product is a growing trend and one we plan to participate in. Normally in ISO 17065 certification the Testing Certification Agency will conduct market audits or arrange to have them conducted. However, as implemented in California, the ISO

Telephone: 202-898-0145 ☒ FAX: 202-898-0148 ☒ [www.ameca.org](http://www.ameca.org) ☒ [info@ameca.org](mailto:info@ameca.org)

17065 Certification only goes as far as the test results from the testing laboratory but no external audit of products on the market.

The manufacturer is allowed to self-certify under Section 66387.3 (a)(4)(B). Why is the manufacturer allowed to self-certify and the Testing Certification Agency is not? The manufacturer has vastly more incentive in this process to comply with California's requirements. In effect, by requiring ISO 17065 certification for the Testing Certification Agency the California is holding the Testing Certification Agency to a different standard than the manufacturer.

Comment#2

Testing laboratories and manufacturers are also able to request different testing standards according to 66387.6(j) this may or may not be an ISO or SAE standard for testing. So a manufacturer can self-certify, the laboratory/manufacturer can apply for different testing protocols but the testing certification agency can only use an ISO 17065 process? Why is the testing certification agency, which is at minimum two steps removed from the products in question, being held to a different standard? California should permit alternative accreditation for a Testing Certification Agency similar to what is available to test laboratories under 66387.5 (c)

Comment #3

Comment #4

If California does require the ISO-certification then the cost analysis based on Washington's is inaccurate and additional cost for ISO certification need to be considered.

Comment #5

We believe that harmonizing with Washington would present the most efficient solution for manufacturers and ultimately to the California. Alternatively, a reciprocity agreement between California and with Washington on the reporting and marking requirements would accomplish the same goal. At minimum, California should allow Testing Certification Agencies to apply for an alternative accreditation similar to that of 66387.5 (c) for test laboratories.

Finally, we appreciate all the effort the State of California has put into protecting the environment and our ability to comment on the process.

Sincerely,



Kevin Wolford  
Executive Director

Automotive Manufacturers Equipment Compliance Agency, Inc.  
1025 Connecticut Ave. N.W. ☒ Suite 1012 ☒ Washington D.C. 20036  
Telephone: 202-898-0145 ☒ FAX: 202-898-0148 ☒ www.ameca.org ☒ info@ameca.org



## California Stormwater Quality Association<sup>®</sup>

*Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation*

May 23, 2016

Ms. Jackie Buttle and Mr. John Meerscheidt  
Office of Planning & Environmental Analysis  
California Department of Toxic Substances Control

**Subject: CASQA Response to 45-day Comment Period on the Formal Draft Regulations for the California Brake Pad Law; DTSC Reference Number: R-2014-01**

Dear Ms. Buttle and Mr. John Meerscheidt:

On behalf of the California Stormwater Quality Association (CASQA<sup>1</sup>), thank you for the opportunity to comment on DTSC's formal draft of regulations to California's law regulating copper, other metals, and asbestos in vehicle brake pads. CASQA's municipal agency members and Caltrans are relying on successful implementation of the California Brake Pad Law to comply with Clean Water Act and California Porter-Cologne requirements to reduce levels of copper in urban stormwater runoff. CASQA strongly supports DTSC's plan to adopt and implement the regulations as quickly as feasible.

Overall we are pleased with the proposed provisions in draft regulations. We find the regulations to be clearly written and appropriately focused only on those topics requiring regulatory clarification. A number of our recommendations on the earlier draft have been incorporated into this version and we thank you for that.

Specifically, CASQA fully endorses DTSC's use of accepted and widely used national and international standards (ISO, NELAP) to ensure the integrity of the certification process. These standards ensure the Testing Certification Agency has sufficient technical capacity, independence, and professional integrity to assume its critical role in the program and that laboratories are independent, reliable and use accurate scientific methods to determine compliance. Unless the certification process is of the highest integrity, it will not achieve the goals of SB 346 or be trusted by Californians.

Comment #1

Furthermore, we strongly concur with DTSC's inclusion of the package marking ("certification mark") in the Marked Proof of Certification (Section 66387.7). This is consistent with Washington State requirements. Clear markings on the product package are the only reasonable means for consumers and auto repair professionals to determine brake pad copper content and compliance level.

Comment #2

<sup>1</sup> CASQA is comprised of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout California. Our membership provides stormwater quality management services to more than 22 million people in California.

CASQA Response to 45-day Comment Period on the Formal Draft Regulations for the California Brake Pad Law

We request DTSC to urge the Motor and Equipment Manufacturers Association (MEMA) to allow use of the trademarked logos by anyone for education and outreach purposes.   Comment #3

Finally, we support DTSC's decision to post all of its decisions on the web and to modify the regulations to provide for that.   Comment #4

Thank you again for your incorporation of most of our previous comments into this rulemaking language. Again, we urge adoption of these regulations without further delay. If you have any questions or would like to set up a meeting, please contact CASQA Executive Director Geoff Brosseau at (650) 365-8620.

Sincerely,



Jill Bicknell, Chair  
California Stormwater Quality Association

cc: Meredith Williams, DTSC Deputy Director  
CASQA Board of Directors and CASQA Executive Program Committee

May 23, 2016

2



## California Stormwater Quality Association

*Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation*

April 29, 2016

Ms. Jackie Buttle, Regulations Coordinator  
Office of planning & Environmental Analysis  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, CA 95812-0806  
Fax Number: (916) 255-3757

Subject: CASQA Response to 45-day Comment Period on the Formal Draft Regulations for the California Brake Pad Law

Dear Ms. Buttle:

On behalf of the California Stormwater Quality Association (CASQA<sup>1</sup>), thank you for the opportunity to comment on DTSC's formal draft of regulations to California's law regulating copper, other metals, and asbestos in vehicle brake pads. CASQA's municipal agency members and Caltrans are counting on successful implementation of the California Brake Pad Law to comply with Clean Water Act and California Porter-Cologne requirements to reduce levels of copper in urban stormwater runoff. CASQA strongly supports DTSC's plan to adopt the regulations. *We urge the Department to complete the regulatory process as quickly as feasible and to begin the important work of enforcing Motor Vehicle Brake Friction Materials Law.*

We are generally pleased with the approach and specific language that DTSC has adopted in the informal draft regulations, which are clearly written and appropriately focused only on those topics requiring regulatory clarification. A number of our recommendations on the earlier draft have been incorporated into this version and we thank you for that.

We urge DTSC to ask NSF International to voluntarily post certifications online as soon as possible, and to urge the Motor and Equipment Manufacturers Association (MEMA) to allow use of the trademarked logos by anyone for education and outreach purposes. CASQA has made these same requests.

Comment #1

Comment #2

<sup>1</sup> CASQA is comprised of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout California. Our membership provides stormwater quality management services to more than 22 million people in California.

We do believe that DTSC has both the authority and obligation to inform the public of various items by posting them on the Internet. In our August 22, 2014 comments on the prior version of informal draft regulations we urged that:

Comment #3

*DTSC specify in the regulations that it will post on its website in a timely manner Testing Certification Agency, certified analytical laboratory, and alternative test method requests for approval (Sections 66275.4 (c), 66275.5 (c), and 66275.6 (j)), DTSC notifications required under Sections 66275.4 (d), 66275.5 (d), 66275.6 (k), and extension requests and renewal requests (Section 66275.8 (a) and (b)).*

CASQA Comments on Draft Informal Brake Friction Material Regulations

We believe that implementing this specific requirement will expedite program compliance – a goal we are all striving for.

Thank you again for your incorporation of some of our previous comments into this rulemaking language and for considering these additional recommendations.

If you have any questions or would like to set up a meeting, please contact Justin Malan at (916) 448-1015 or justin@ecoconsult.biz or CASQA Executive Director Geoff Brosseau at (650) 3658620.

Sincerely,



Gerhardt Hubner, Chair  
California Stormwater Quality Association

cc: Meredith Williams, Deputy Director, DTSC  
Karl Palmer, DTSC  
William Hereth, California State Water Resources Control Board  
Dave Tamayo, Sacramento County  
Justin Malan, Ecoconsult  
CASQA Board of Directors  
CASQA Executive Program Committee

December 5, 2014

2

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Protecting Alameda County Creeks, Wetlands & the Bay

VIA E-MAIL [REGS@DTSC.CA.GOV]

May 20, 2016

Ms. Jackie Buttle, Regulations Coordinator  
Office of Planning & Environmental Analysis  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, CA 95812-0806

399 Elmhurst St.  
Hayward, CA  
94544  
p. 510-670-5543

Subject: Hazardous Materials: Motor Vehicle Brake Friction Materials  
Proposed Regulations - DTSC Reference Number: R-2014-01

Dear Ms. Buttle:

MEMBER AGENCIES:

- Alameda
- Albany
- Berkeley
- Dublin
- Emeryville
- Fremont
- Hayward
- Livermore
- Newark
- Oakland
- Piedmont
- Pleasanton
- San Leandro
- Union City
- County of Alameda
- Alameda County Flood Control and Water Conservation District
- Zone 7 Water Agency

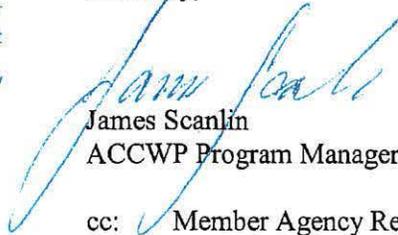
Thank you for the opportunity to file comments on the proposed regulations to phase out the content of copper and other heavy metals in motor vehicle brake friction materials. The Alameda Countywide Clean Water Program (“Program”) is a stormwater management consortium comprising the County of Alameda, the 14 cities within the County, the Alameda County Flood Control District, and the Zone 7 Water Agency.

The Program firmly supports these regulations that will implement the legislative requirements of SB346, which was passed in 2010 with support from a coalition of industry, government and environmental groups due to widespread impacts of copper from brake friction materials on aquatic life in California streams, lakes and estuaries. The Program contributed to scientific studies that demonstrated the need for these regulations and has supported ongoing efforts by the California Stormwater Quality Association (CASQA) to comment on previous draft regulations.

Comment #1

We thank you again for the opportunity to provide our comments and we ask that DTSC continue working with CASQA to finalize these regulations. If you have any questions, please contact me at (510) 670-6548 or [jims@acpwa.org](mailto:jims@acpwa.org).

Sincerely,

  
James Scanlin  
ACCWP Program Manager

cc: Member Agency Representatives

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7th GENERATION  
Advisors



Sustainable Conservation

May 20, 2016

Comment Letter #6

Ms. Jackie Buttle, Regulations Coordinator  
Office of Planning & Environmental Analysis  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, CA 95812-0806

**Subject: Response to 45-day Comment Period on the Formal Draft Regulations for the California Brake Pad Law**  
**DTSC Reference Number: R-2014-01**

Dear Ms. Buttle:

On behalf of the undersigned organizations we are pleased to submit our comments on DTSC’s formal draft of regulations to California’s law regulating copper, other metals, and asbestos in vehicle brake pads.

Our organizations have a strong interest in the successful implementation of the California Brake Pad Law in order to assist in compliance with Clean Water Act and California Porter-Cologne requirements to reduce levels of copper in urban stormwater runoff. We support the adoption of these proposed regulations without further delay.

We concur with all of the major provisions in these draft regulations, which are clearly written and appropriately focused only on those topics requiring regulatory clarification.

Comment #1

Our organizations support the use of accepted and widely used national and international standards (ISO, NELAP) by the department to ensure the integrity of the certification process. These standards ensure the Testing Certification Agency has sufficient technical capacity, independence, and professional integrity to assume its critical role in the program and laboratories are independent, reliable and use accurate scientific methods to determine compliance. Unless the certification process is of the highest integrity, it will not achieve the goals of SB 346 or be trusted by Californians.

Comment #2

In addition, we concur with DTSC’s inclusion of the package marking (“certification mark”) in the Marked Proof of Certification (Section 66387.7). Clear markings on the product package are the only reasonable means for consumers and auto repair professionals to determine brake pad copper content and compliance level.

Comment #3

To assist in the effective implementation of this program, we encourage DTSC to urge the Motor and Equipment Manufacturers Association (MEMA) to allow use of the trademarked logos by anyone for education and outreach purposes. Effective local outreach is essential.

Comment #4

We are pleased that the rulemaking process is being concluded and trust that DTSC will adopt and enforce these regulations without any further delay.

Sincerely,

*Andria Ventura*

\*\*\*\*\*

Andria Ventura - Clean Water Action

*Rita Kampalath*

Rita Kampalath - Heal the Bay

*Leslie Mintz Tamminen*

Leslie Mintz Tamminen - Seventh Generation Advisors

*J. Stacey Sullivan*

J. Stacey Sullivan - Sustainable Conservation

cc: Meredith Williams, DTSC Deputy Director

May 23, 2016

Ms. Jackie Butler, Regulations Coordinator  
Office of Planning and Environmental Analysis  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, California 95812-0806

*Sent Electronically to: [regs@dtsc.ca.gov](mailto:regs@dtsc.ca.gov)*

**SUBJECT:** Comments on California Motor Vehicle Brake Friction Material Draft Regulations

Dear Ms. Butler:

We are writing on behalf of the members of the Association of Global Automakers, Inc.<sup>1</sup> (“Global Automakers”) and the Alliance of Automobile Manufacturers<sup>2</sup> (“Auto Alliance”), which include nearly every company selling new motor vehicles in the United States. We appreciate the opportunity to provide the following comments on the California Motor Vehicle Brake Friction Material Draft Regulations<sup>3</sup> (“draft regulations” or “regulation”) for the Brake Friction Material Law<sup>4</sup> (“California statute” or “statute”).

### **OVERVIEW**

On April 8, 2016, the Department of Toxic Substance Control (“DTSC”) proposed to adopt California Code of Regulations, Title 22, Chapter 35. These draft regulations propose performance requirements for (1) testing the chemical content of brake friction materials, (2) marking compliant brake friction materials, (3) reviewing certification procedures used by the testing certification agency, (4) approving alternative chemical analytical testing methods for brake friction materials, and (5) approving alternative laboratory accreditation standards for analytical laboratories. The proposed regulation would also clarify the process to approve extension requests for the year 2025 statutory requirements.

<sup>1</sup> Global Automakers’ members include Aston Martin, Ferrari, Honda, Hyundai, Isuzu, Kia, Maserati, McLaren, Nissan, Subaru, Suzuki, and Toyota. Please visit [www.globalautomakers.org](http://www.globalautomakers.org) for further information.

<sup>2</sup> Auto Alliance members are BMW, Chrysler, Ford, General Motors, Jaguar Land Rover, Mazda, Mercedes-Benz, Mitsubishi, Porsche, Toyota, Volkswagen, and Volvo. Please see [www.autoalliance.org](http://www.autoalliance.org) for further information.

<sup>3</sup> California Code of Regulations, Title 22, Chapter 35.

<sup>4</sup> Health and Safety Code §§ 25250.50 et. seq.

## CONCERNS

We thank DTSC for addressing a number of concerns that we raised with earlier drafts of the regulations. We appreciate DTSC's willingness to include language that clarifies that the "mark of proof of certification" is a two-part marking system that is harmonized with the Washington State requirements. We also appreciate that DTSC has removed the confusing edge code terminology from the definitions and the regulatory text.

Based on our review of this current proposal that provides the performance requirements necessary to comply with the Brake Friction Material Law, we have a number of concerns. These concerns are driven by the need to ensure that these regulations are developed and implemented in a manner that allows for clarity for the consumer and provides a consistent approach for the automotive sector as we strive to comply with similar regulations in Washington State and the voluntary agreements reflected in the U.S. Environmental Protection Agency's ("EPA") Memorandum of Understanding ("MOU")<sup>5</sup>. Our concerns focus on the following:

1. Maximizing Harmonization with Washington State Requirements
2. Testing Requirements and Record Keeping Requirements

### ***1. Maximizing Harmonization with Washington State Requirements***

We continue to have concerns about unnecessary regulatory burdens resulting from a lack of harmonization between the Washington and California programs. We understand that DTSC believes it lacks the authority under the current California statute to provide reciprocity in the regulations. However, there are additional areas where harmonization is not only essential, but specifically directed by the statute. Lack of harmonization in some key areas between the two programs creates a near-impossible compliance regime for brake manufacturers and automakers and will create confusion for end users.

Comment #1

***Exemption Markings:*** In its "Response to Comment" document,<sup>6</sup> DTSC clarified that brake friction material marked with Washington State's mandatory exemption markings ("WX" or "X") will be acceptable if the markings are "used in an *optional field* [emphasis added] of the format specified under SAE J866:2012 *or on another location* [emphasis added] on the brake pads."<sup>7</sup> The "Response to Comment" document is not a binding record so for compliance predictability it is imperative that DTSC affirmatively state that it does not prohibit the use of these markings in its final regulations. The statute states that the certification and mark of proof shall show a consistent date format, designation, and labeling "to facilitate acceptance in all 50 states and U.S. territories" for purposes of demonstrating compliance with all applicable

Comment #2

<sup>5</sup> Memorandum of Understanding on Copper Mitigation in Watersheds and Waterways, 2015. <https://www.epa.gov/npdes/copper-free-brake-initiative>.

<sup>6</sup> DTSC Response to Comments on the Informal Draft Regulations: October 3, 2014.

<sup>7</sup> *Id.*

requirements.<sup>8</sup> Therefore, it is consistent with the statute to include the following statement in the final regulations:

Comment #2

*Exemption markings required by Washington State or any other state are not prohibited from use and may be shown in an optional field of the format specified under SAE J866:2012 or on another location on the brake friction material.*

**Leaf Mark™:** We also request that DTSC include language in this rulemaking that speaks directly to the Leaf Mark™ for packaging compliant brake friction materials. While the Initial Statement of Reasons (“ISOR”) addresses this issue in § 66387.7(a), we believe that to further the harmonization with Washington State and to codify AASA’s Leafmark™ as acceptable on packaging, clear and specific language is necessary. As with our earlier comment on the exemption markings, we believe that this would be consistent with the statute.

Comment #3

## **2. Testing Requirements and Record Keeping Requirements**

The proposed regulations do not address the issues of whether and how testing performed prior to these new requirements can be used to satisfy the certification requirements. If a manufacturer had their brake friction material tested for Washington State compliance, DTSC should honor the results of that testing. Having to perform duplicative testing is costly and onerous, with little to no benefits because constituent levels have already been quantified. We also believe that the requirement for testing to be done in triplicate due to “margin of error” in the test method is unduly burdensome and costly. If the testing method is flawed or inaccurate, DTSC should identify and require a better approach.

Comment #4

Furthermore, maintaining records for 10 years is overly burdensome and does not align with most federal and state environmental recordkeeping requirements. We urge DTSC to reduce the record retention requirements to something more consistent with federal recordkeeping requirements.

## **CONCLUSION**

We appreciate that DTSC is working diligently to make these regulations workable and effective. Many of the recommended changes that DTSC has incorporated have moved the regulations in that direction, however, there are additional changes that would further facilitate ease of adoption and compliance that would be wholly consistent with the authorizing statute. Maximizing harmonization with Washington State’s mandates is critical.

We thank you for considering our comments; we look forward to additional opportunities to comment on the regulations. We would welcome the opportunity to discuss these issues with you

<sup>8</sup> Article 13.5 Sec 25250.60(j).

via teleconference. Please do not hesitate to contact us with questions or if we may provide additional information. We look forward to working with DTSC as it moves forward.

Best Regards,



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**Motor & Equipment Manufacturers Association**

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www.mema.org



**Brake Manufacturers Council**

Comment Letter #8

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**The Motor & Equipment Manufacturers Association  
and the  
Brake Manufacturers Council of the Automotive Aftermarket Suppliers Association  
Comments to the  
State of California Environmental Protection Agency  
Department of Toxic Substance Control**

**RE: Formal Proposed Rule, Motor Vehicle Brake Friction Material**

**May 23, 2016**

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The Motor & Equipment Manufacturers Association (MEMA) represents more than 1,000 companies that manufacture motor vehicle systems and parts for use in the light and heavy-duty vehicle original equipment and aftermarket industries. The motor vehicle parts manufacturing industry is the nation's largest direct employer of manufacturing jobs – over 734,000 workers are employed by suppliers in all 50 states. MEMA represents its members through four divisions: Automotive Aftermarket Suppliers Association (AASA), Heavy Duty Manufacturers Association (HDMA), Motor & Equipment Remanufacturers Association (MERA) and Original Equipment Suppliers Association (OESA).

The Brake Manufacturers Council (BMC), which is a product council of the AASA, represents manufacturers of brake systems, components and friction materials.

In January 2015, MEMA, BMC and multiple other industry stakeholders, including the vehicle manufacturers, signed a Memorandum of Understanding (MOU) with the U.S. Environmental Protection Agency.<sup>1</sup> The MOU establishes a voluntary agreement to carry out practices and approaches under a framework called the "Copper-free Brake Initiative," modeled on the laws in California and Washington. The purpose of this endeavor of the MOU was to bring various industry and government stakeholders under a national framework and to reduce the burden of meeting multiple, varying laws that create redundant burdens and result in unnecessary complications.



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<sup>1</sup> Memorandum of Understanding on Copper Mitigation in Watersheds and Waterways between U.S. EPA and Motor Equipment Manufacturers Association, Automotive Aftermarket Suppliers Association, Brake Manufacturers Council, Heavy Duty Manufacturers Association, Auto Care Association, Alliance of Automobile Association, Association of Global Automakers, Truck and Engine Manufacturers Association, and Environmental Council of the States, January 21, 2015.

## Summary of Concerns

We would like to thank the California Department of Toxic Substances Control (DTSC) for addressing a number of concerns that we raised with the Draft Regulations for the Brake Friction Material Law. As we outline below, we support much of the proposed regulation. Our remaining concerns are based on the need to ensure the California regulation is implemented in a manner that provides clarity for brake friction materials manufacturers as we continue to make significant investments to comply with not only California regulations, but also similar regulations in Washington State and the voluntary agreements reflected in the MOU. Our comments focus on five areas:

1. Clarity in Exemptions and Inventory Sell Down
2. Support of No Requirements for Exemption Markings
3. Product Marking and Packaging Labeling Consistency
4. Enforcement of Testing Certification Agency Requirements
5. Self-Certification of Compliance Language
6. Definition of Replacement Parts and Original Equipment Service Contracts

## Clarity in Exemptions and Inventory Sell Down

In our 2014 comments, MEMA and BMC requested that California allow for inventory sell down that aligns with the State of Washington and the Copper-free Brake Initiative MOU which allows for a timeline of 10 years.<sup>2</sup> DTSC makes clear in its response to comments<sup>3</sup> that our proposed language on inventory sell down will not be added because the affected sections of the statute, Health and Safety Code (HSC) section 25250.55(g) and 25250.55(h) that address inventory sell down are clear and do not need a regulation to interpret the section of the statute.

### Request for Clarifying Language for Section 25250.55(g) and (h)

However, in order to provide certainty for the brake friction manufacturers industry, MEMA and BMC request that DTSC provide clarifying language that Section 25250.55(g) and (h) applies to both original equipment service (OES) contracts and aftermarket replacement parts. The statute allows for an exemption of brake friction materials for use on vehicles manufactured prior to January 1, 2021 from the requirements of Section 25250.52 (less than 5 percent copper by weight) and allows for an exemption of brake friction materials for use

Comment  
#1

<sup>2</sup>ibid., Section VIII, E, p. 12.

<sup>3</sup> Department of Toxic Substances Control Responses to Comments on the Informal Draft Regulations, Division 4.5, California Code of Regulations, Title 22 Chapter 25. Hazardous Materials: Motor Vehicle Brake Friction Materials, October 3, 2014, p.2.



on vehicles manufactured prior to January 1, 2025 from requirements of Section 25250.53 (less than .5 percent copper by weight). It would provide the industry great certainty to have clarification that these exemptions apply to both brake friction materials manufactured for the vehicle aftermarket and as part of an OES contract. As we explain below, both categories of brake friction materials are intended for a series of vehicle models and model years (MYs).

Comment  
#1

#### Discussion on OES Contracts and Aftermarket

There are essentially two types of market channels for replacement brake friction materials – OES and aftermarket. Brake friction material manufactured as part of an OES contract will be used as service parts or is manufactured as part of a contract with the vehicle manufacturer and sold directly to the vehicle manufacturer that use material that is identical to the brake friction material formulation sold with a new motor vehicle. Brake friction material manufactured as part of an OES contract are designed and manufactured for use on a series of vehicle models and MYs and are often required to supply replacement parts to motor vehicle manufacturers for 10 years.

Brake friction material manufactured for the aftermarket is brake friction material offered as a replacement part. Brake friction material aftermarket replacement parts not manufactured as part of an OES contract will often try to match the original brake friction material formulation sold with new motor vehicles and is designed and manufactured for a series of vehicle models and MYs. For instance, in 2018 an aftermarket brake manufacturer will manufacture brake friction material that will be very similar to brake friction material that is sold with a motor vehicle manufactured in 2018. Product catalogs for these aftermarket brake friction materials will indicate which series of vehicle models and MYs these products were intended.

If there is no allowance of inventory sell down for aftermarket replacement parts, there will be a significant, negative impact on the availability of “allowed” friction materials in the State’s market for consumers. The lowered supply of “allowed” friction materials may force consumers to use a product that either may not fit their budget or may not meet their expectation of performance. If there is no allowance for inventory sell down that is aligned with the State of Washington and the MOU, at a minimum, the regulation needs to make clear the exemptions included in Section 25250.55(g) and (h) apply to brake friction material for OES contracts and aftermarket replacement parts.

#### Exemption Markings

The California statute does not require exemption markings on brake friction material and, appropriately, DTSC regulation has not proposed regulatory language on the issue. MEMA and BMC support that California does not require exemption markings on brake friction material and support DTSC not adding regulatory language on exemption markings.

The Washington law does not require that all brake friction material indicate it is exempt, but the law does require markings for exempt brake friction material if it is part of an OES

Comment 2



contract by using the marks "WX" or "X".<sup>4</sup> If California required separate exemption markings it would create an extremely impracticable, unreasonable, and very costly situation for brake manufacturers to mark friction materials differently for brakes distributed to Washington versus California. It would also create confusion in the marketplace for distributors, retailers, technicians, and consumers. We appreciate DTSC making clear in October 3, 2014 response to comments that the agency will accept "WX" or "X" as long as it is appropriately used in an optional field of the format specified under SAE J866:2012.<sup>5</sup>

Comment 2

### Product Marking and Packaging Labeling Must Be Consistent [66387.8]

We understand that California's law does not explicitly require package labeling as the Washington law requires. Because brake friction material manufacturers are changing their products and product packaging to be compliant with both the California and Washington laws, it is important that California recognizes or accepts Washington's marking and packaging labeling requirements. As we state in our December 2014 comments, we applaud DTSC for proposing regulatory language for environmental compliance marks ("A", "B", "N"). Although package labeling is not required in the California law, DTSC recognized the importance of a package label to communicate the products' level of compliance.

The BMC developed the LeafMark™ logo to meet the package labeling requirements for the State of Washington and is being applied to packaging on all products sold nationwide. The LeafMark™ meets the package marking needs via a 3-leaf logo that includes the alpha character ("A", "B", "N") designating the environmental compliance mark. The logo is intended to be an easy-to-understand format for consumers, retailers and installers. The LeafMark™ logo is also discussed and recognized by stakeholders in the Copper-free Brake Initiative MOU.<sup>6</sup> Over the past few years, the brake friction material manufacturers have made significant investments and applied multiple resources to make the necessary marking and labeling changes to all of its products to meet the State of Washington requirements. This included revising and creating industry standards and test methods as well as developing trademarked materials for packages. These are not insignificant alterations. Any deviation in marking requirements would be unacceptable to the industry.

We recognize that DTSC does not need to require the LeafMark™. We request, however, that DTSC includes regulatory language in the final rule that it recognizes and accepts the LeafMark™ on brake friction materials sold in California.

Comment 3

<sup>4</sup> WAC 173-901-150 (4)(b)(ii).

<sup>5</sup> Department of Toxic Substances Control Responses to Comments on the Informal Draft Regulations, Division 4.5, California Code of Regulations, Title 22 Chapter 25. Hazardous Materials: Motor Vehicle Brake Friction Materials, October 3, 2014, p.3.

<sup>6</sup> The Copper-free Brake Initiative MOU, Section VI, A.1.d., p. 7.



## Testing Certification Agency for Brake Friction Material [66387.4]

MEMA and BMC support DTSC's requirement that the testing certification agency be accredited in accordance with requirements of either ISO/IEC 17065:2012 standard or the ISO/IEC Guide 65:1996 standard. These standards require that the laboratory and the testing certification agency (or registrar) are separate entities. It is imperative that DTSC enforce this requirement.

Comment 4

## Self-Certification of Compliance [66387.3]

MEMA and BMC request that DTSC clarify language under 'Step 5' in part (C)(b) by defining or at least discussing in the regulation what 'one set of testing results' means. Self-certification should be taking testing samples of each formulation and should not require testing each edge code. Each formulation could be identified by over a dozen edge codes. Requiring brake friction material manufacturers to self-certify by testing every edge code would be impracticable, extremely burdensome, and cost prohibitive.

Comment 5

Under the same section, MEMA and BMC strongly urge the State not to reference an industry standard's specific year in the text of the rule without adding to the reference a caveat for the latest revision or edition. The SAE International protocol is to review standards every five years – or sooner, if needed. When a standard is revised and updated to reflect improvements in test protocols or reconfirmed that it is up to date in its present condition, the standard is published to reflect that year.

Comment 6

We understand that California Administrative Code, title 1, section 20 requires that the document be identified by title and date of issuance. Therefore, when DTSC sites a document and title (i.e. SAE J866:2012), we urge DTSC to then add to the reference "or the latest edition or revision." Referencing a specific year without having a caveat for the latest edition, greatly limits the State's regulation only to that specific year. Consequently, future publications of that particular SAE International Standard would not be valid under the State's rule.

## Definitions [66387.1]

In the proposed regulatory text for the Extension Process (Section 66387.9), DTSC requires that a manufacturer requesting an extension provide information on whether the brake friction material is intended for use in original equipment or replacement parts. MEMA and BMC request that DTSC define 'replacement parts.' Replacement parts should be defined as brake friction material that meets the environmental compliance requirements and is installed on a vehicle as a replacement part that may not be the same brake formulation as the original equipment manufacturer or original equipment service contract brake friction material.

Comment 7

If DTSC provides clarifying language that Section 25250.55(g) and 25250.55(h) applies to OES contracts and aftermarket replacement parts, DTSC should include definitions of 'replacement parts' and 'brake friction material manufactured as part of an OES contract.'



Brake friction material manufactured as part of an OES contract should be defined as brake friction material that: (a) Is provided as service parts originally designed for and using the same brake friction material formulation sold with a new motor vehicle and there have been no changes to the original design of the service part's brake friction formulation; or (b) Is manufactured as part of a contract between a vehicle manufacturer and a brake friction material manufacturer that requires the brake friction material manufacturer to provide brakes with the identical brake friction material formulation to those that originally came with a new motor vehicle, and the brake friction material manufacturer only sells these parts directly to the vehicle manufacturer. This definition of brake friction material manufactured as part of an OES contract is aligned with the definition in the State of Washington statute.<sup>7</sup>

Comment  
8

MEMA and BMC appreciate consideration of the recommendations presented herein. Please do not hesitate to contact Laurie Holmes at 202-312-9247 or [lholfmes@mema.org](mailto:lholfmes@mema.org) with questions or for additional information. We look forward to working with DTSC as this proposed rule moves forward.

Respectfully Submitted,

A handwritten signature in black ink that reads "Ann Wilson".

Ann Wilson  
Senior Vice President  
Motor & Equipment Manufacturers Association

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<sup>7</sup> Chapter 173-901 WAC, Better Brakes Law

Regulations Text

DIVISION 4.5, CALIFORNIA CODE OF REGULATIONS, TITLE 22  
CHAPTER 35. CALIFORNIA BRAKE FRICTION MATERIAL REQUIREMENTS

66387.1 Definitions

- (a) "Accredited laboratory" means a laboratory that meets the requirements of California Code of Regulations, title 22, section 66387.5.
- (b) "Alternative laboratory accreditation" means a laboratory accreditation standard that does not meet the requirements of ISO/IEC 17025:2005, or a laboratory accreditation program that is not recognized by the National Environmental Laboratory Accreditation.
- (c) "Alternative testing method" means a chemical analysis testing method or chemical analysis sample processing method that is not cited in testing protocol SAE J 2975; ~~DECEMBER 2013~~ or a test results reporting method different from the methodology specified in California Code of Regulations, title 22, section 66387.6(g).
- (d) "Brake friction material" means that part of a motor vehicle brake designed to retard or stop the movement of a motor vehicle through friction against a rotor made of a more durable material.
- (e) "Certification mark" means a mark that appears on the brake friction material packaging to self-certify the product is compliant with the requirements of either Health and Safety Code section 25250.51, 25250.52, or 25250.53.
- (f) "Department" means the Department of Toxic Substances Control.
- (g) "Environmental compliance level" means the single letter that specifies the constituent concentration levels which a friction formulation does not exceed as specified the California Code of Regulations, title 22, sections 66387.8(b), 66387.8(c), and 66387.8(d).
- (h) "Environmental compliance marking" means a three character alphanumeric identification code that meets the requirements of California Code of Regulations, title 22, section 66387.8. It is the environmental compliance level followed by the two-digit year of manufacture.
- (i) "Manufacturer," except where otherwise specified, means both of the following:
  - (1) A manufacturer or assembler of motor vehicles or motor vehicle equipment.
  - (2) An importer of motor vehicles or motor vehicle equipment for resale.
- A "manufacturer" includes a vehicle brake friction materials manufacturer. In each instance the term "manufacturer" is used, this chapter identifies which type of manufacturer is referred to.
- (j) "Marked proof of certification" means:
  - (1) ~~the~~ the unique identification code and environmental compliance marking marked on the brake friction material; and
  - (2) ~~a~~ A self-certification mark that appears on the brake friction material packaging that provides attestation that the brake friction material has been correctly tested and self-certified as compliant with the requirements in Health and Safety Code section 25250.51, 25250.52, and 25250.53.
- (k) "Motor vehicle" and "vehicle" means a device by which a person or property may be propelled, moved, or drawn upon a highway, excepting a device moved exclusively by human power or used upon stationary rails or tracks.
- (l) "Regulated constituents" means:
  - (1) ~~asbestiform Asbestiform~~ asbestiform fibers; and,
  - (2) ~~cadmium Cadmium~~ cadmium and its compounds; and,
  - (3) ~~chromium-Chromium~~ chromium (VI)-salts; and,

Comment 1

Comment 2

Comment 3

Comment 4

Comment 5

Comment 6

Comment 7

Comment 8

Comment 9

**Comment [SL1]:** Changed because on the December-2013 revision of SAE J2975, its version is actually marked as DEC2013. Made this same change throughout the document.  
**Comment 1**

**Comment [SL2]:** Added so that it is clear in multiple places that alternate methods of reporting data may be used but California must approve those alternate methods prior to use as even just changing the reporting method/requirements is considered an Alternative Testing Method  
**Comment 2**

**Comment [SL3]:** Changed all instances of "certified" to "self-certified" as this is actually a self-certification program since the Testing Certification Agency is not performing onsite audits and In-market testing as would be necessary for a true certification program. And, the industry thinks of this entire program as a self-certification program.  
**Comment 3**

**Comment [SL4]:** Added because the Testing Certification Agency actually only assigns the letter portion (A, B, or N) of the Environmental Compliance Marking. It was therefore useful to have a new definition which only refers to the single letter rather than the entire 3-character ID.  
**Comment 5**

**Comment [SL5]:** Added so the definition of Environmental Compliance Marking is in the Definitions section rather than 66387.8(a).  
**Comment 6**

**Comment [SL6]:** Unsure if this is true. Most sections always refer to "manufacturers of brake friction material". But section 66387.9 only refers to "manufacturers" rather than "manufacturers of brake friction material". Therefore, is this sentence always correct?  
**Comment 7**

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**Comment [SL7]:** Separated these into sections to make it clear "Marked proof of certification" is comprised of 2 separate parts:  
1. The combination of Unique Identification Code and Environmental Compliance Marking  
2. The self-certification mark on the packaging  
**Comment 8**

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Comment 9

(4) ~~lead-lead~~ and its compounds; and

~~(5)~~ mercury ~~Mercury~~ and its compounds.

(k)(m) "Rotor" means the rotating portion of a motor vehicle brake system including, but not limited to, brake disks and brake drums.

(h)(n) "Secretary" means the California Secretary for Environmental Protection.

(m)(o) "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 testing certification agency's requirements that are approved by the department. The term "registrar" is used by the industry when referring to this entity.

Comment 10

(n)(p) "Unique identification code" means the combination of "Company Assigned ID" and "Formulation Identification" referenced in SAE J 866:JUL2012 section 3.

Comment [SL8]: Separated these into sections for greater readability.  
Comment 9

NOTE: Authority cited: Health & Safety Code sections 25250.50, 25250.55, and 58012. Reference: Health and Safety Code sections 25250.50 – 25250.65.

## 66387.2 References

(a) When used in Chapter 25, the following publications are incorporated by reference:

- (1) ILAC-P5:10:2013, "International Laboratory Accreditation Cooperation (ILAC) Multilateral Recognition Arrangement", dated 2013, available from the ILAC Secretariat, PO Box 7507, Silverwater, NSW 2128, Australia.
- (2) ISO/IEC Guide 65:1996, "General requirement for bodies operating product certification systems," dated 1996, available from the International Organization for Standardization (ISO), ISO Central Secretariat, 1, ch. de la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland
- (3) ISO/IEC 17011:2005, "General requirements for accreditation bodies accrediting conformity assessment bodies", dated 2005, available from International Organization for Standardization (ISO), ISO Central Secretariat, 1, ch. de la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland
- (4) ISO/IEC 17025:2005, "General requirements for the competence of testing and calibration laboratories," dated 2005, available from International Organization for Standardization (ISO), ISO Central Secretariat, 1, ch. de la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland
- (5) ISO/IEC 17065:2012, "Conformity assessment -- Requirements for bodies certifying products, processes and services," dated 2012, available from International Organization for Standardization (ISO), ISO Central Secretariat, 1, ch. de la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland
- (6) NELAC Institute Standard, Environmental Laboratory Sector, Volume 1, "Management and Technical Requirements for Laboratories Performing Environmental Analysis," dated 2009, available from The NELAC Institute, P. O. Box 2439, Weatherford, TX 76086;
- (7) SAE J 866:JUL2012, "Friction Coefficient Identification and Environmental Marking System for Brake Linings," dated July 2012, available from the Society of Automotive Engineers (SAE) Customer Service, 400 Commonwealth Drive, Warrendale, PA 15096-0001;

Comment 11

- (8) SAE J 2975:DECEMBER2013, "Measurement of Copper and Other Elements in Brake Friction Materials," dated December 2013, available from the Society of Automotive

Engineers (SAE) Customer Service, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

NOTE: Authority cited: Health and Safety Code sections 25250.50, 25250.60, and 58012. Reference: Health and Safety Code section 25260.60.

### **66387.3 Self-certification of compliance**

For the purposes of this section, self-certification means the process where the brake friction material manufacturer registers their brake friction material with the a testing certification agency. The testing certification agency verifies the brake friction material is tested by an analytical laboratory accredited in accordance with California Code of Regulations, title 22, section 66387.5(a) and is analyzed using testing protocol SAE J 2975:2015-DEC2013 or an alternative testing method approved under section 66387.6(i) 66387.6, subsection (i). The testing certification agency assigns the environmental compliance marking level and publicly posts the following on its website: the marked proof of certification registered unique identification code(s), the assigned environmental compliance level for each registered unique identification code, and self-certification documentation on their website. This section provides detailed steps on the self-certification process.

(a) Manufacturers of brake friction material shall self-certify the formulation of any brake friction material that is sold or offered for sale in California complies with the requirements of Health and Safety Code sections 25250.51, 2550.52, and 25250.53 using the following process:

- (1) Step 1: Submit a sample of each manufactured brake friction material for laboratory testing. A manufacturer of brake friction material shall submit a sample of brake friction material to a laboratory approved by the testing certification agency to perform testing in accordance with California Code of Regulations, title 22, section 66387.5.
- (2) Step 2: Receive confirmation from the laboratory that all required laboratory testing results for each brake friction material were submitted to the testing certification agency. If the manufacturer does not receive confirmation from the laboratory, then the manufacturer of the brake friction material shall contact the testing certification agency and confirm that all laboratory testing results needed required to self-certify a given friction material formulation were received by the testing certification agency. The manufacturer of brake friction material may review the testing results prior to the laboratory sending the results to the testing certification agency. All testing and reporting of results must be carried out in accordance with California Code of Regulations, title 22, section 66387.6.
- (3) Step 3: Ensure that each brake friction material that complies with the requirements of Health and Safety Code sections 25250.51, 25250.52, and 25250.53 is assigned by the manufacturer of the brake friction material a unique identification code ending in the appropriate environmental compliance marking as described in California Code of Regulations, title 22, section 66387.7.
- (4) Step 4: Submit self-certification documentation to a testing certification agency. Self-certification documentation must include:
  - (A) The contact information for the manufacturer of brake friction material(s) including but not limited to:
    1. The contact person's name; and
    2. The contact person's job title; and
    3. The contact person's e-mail address; and
    4. The business's name; and

Comment 12

Comment 13

Comment 14

Comment 15,  
16, 17, 18, 19,  
& 20

Comment 21

Comment 22

Comment 23 & 24

Comment 25

Comment [SL9]: I believe this is a typo as the rest of the document solely references SAE J2975:DEC2013.  
Comment 13

Comment [SL10]: Changed because the Testing Certification Agency only actually assigns the compliance level (A, B, or N) but does not post or specifically tell the manufacturer all the 3-character combinations they can use. The 3-character combinations can be inferred based on the publicly posted registration start dates and registration end dates.  
Comment 15

Comment [SL11]: Changed this because being required to post the "marked proof of certification" would require the Testing Certification Agency post the marks described in 66387.1(i)(2). In other words, the TCA would have to post the LeafMarks. I'm unsure if California actually wants to require the TCA post copies of the LeafMarks. Since the LeafMarks are privately owned, posting them in their entirety (not just low-resolution versions of them as NSF currently does) may be problematic/require legal wrangling to get the necessary permissions.  
Comment 18

Comment [SL12]: Added to make it clear that the manufacturer assigns the Unique Identification Code rather than the Testing Certification Agency.  
Comment 25

- 5. The business's address; and
  - 6. The business's phone number or the contact person's phone number
- (B) A signed and dated statement by an authorized representative of the brake friction material manufacturer declaring that all brake friction materials bearing the listed unique identification codes are of the same composition as those submitted to the laboratory and whose results were submitted to the testing certification agency and meet all of the requirements of Health and Safety Code section 25250.60 subdivision (c), subdivision (e), and subdivision (g).

Comment 26

Comment 27

Comment 28

The statement shall include, but is not limited, to language identical or similar to that specified in California Code of Regulations, title 22, section 66387.3(a)(4)(B)166387.3, subsection (a)(4)(B)1-1.

Comment 29

1. I, the undersigned, on behalf of the above named Company, approve, assert, and certify as true and accurate all information shown in this document. I hereby assert that the friction materials bearing the marked proof of certification set forth in this self-certification document are substantially identical to the products submitted for testing and meet the requirements of all applicable codes, regulations, rules, and laws including those specified in the addendum below. I hereby authorize [testing certification agency name] to publicly post all information required to be made public by any United States laws in accordance with the law and any written contracts between [testing certification agency name] and the Company specified above. I hereby assert that all test results used to issue this self-certification comply with all requirements of the law and any contracts between [testing certification agency name] and the Company specified above. Company agrees that [testing certification agency name] shall have no liability to Company or any third party with respect to release of the above referenced Company data to any government agency with the legal authority to receive such data. I hereby assert that I have the authority to make this authorization and assertion on behalf of the Company specified above. Any written modifications to this Affidavit section are not acceptable and invalidate this self-certification. This document shall serve as proof of self-certification as required by Health and Safety Code sections 25250.60 subdivision (c), subdivision (e), and subdivision (g).

- (5) Step 5: Receive confirmation from the testing certification agency that each brake friction material that complies with the requirements of this chapter is posted on the Internet in a publicly accessible and searchable database or list.

Comment 30  
Comment 31

- (A) [The testing certification agency shall at least once notify the Department either in writing or electronically of URL where the information was publicly posted on the Internet.

1. For an electronic submittal, a person shall send the request to the Department via electronic mail (brakepad@dtsc.ca.gov) on the Department's website at <http://www.dtsc.ca.gov> with the subject

line "Attention: California Brake Pad Certification Notification" displayed in the subject line of the electronic mail; or

- 2. For a written submittal, a person shall send the request to the Department via certified mail, return receipt requested, at the following address: Department of Toxic Substances Control, Safer Products and Workplaces Program, P.O. Box 806, Sacramento, CA 95812-0806, with the words "Attention: California Brake Pad Certification Notification" prominently displayed on the front of the envelope.

**Comment [SL13]:** Is this saying that every time a TCA posts new edge codes then the TCA must notify California via [brakepad@dtsc.ca.gov](mailto:brakepad@dtsc.ca.gov)? Or is this just a one-off requirement for the TCA to inform CA the location of the public listing page?

Based on 66387.3(a)(5)(C) I assumed this is meant to be a one-off requirement and modified it accordingly.

**Comment 32**

Comment 33

- (B) The notification to the manufacturer must include the manufacturer's name, the unique identification code, and the full URL address to the certification document.
- (C) The testing certification agency shall notify the Department within thirty (30) days whenever the Internet address of this database or list changes using the notification procedures in subsection 66387.3(a)(5)(A)1(A)1 and 66387.3(a)(5)(A)2(A)2 of this section.

Comment 34

- (6) Step 6: Ensure that brake friction material is marked with the marked proof of certification in accordance with California Code of Regulations, title 22, section 66387.7.

Comment 35

(b) Manufacturers of brake friction material may use one set of testing results and self-certification documentation, and a single unique identification code for multiple products using an identical brake friction material formulation.

Comment 36

Comment 37

(c) Manufacturers of brake friction material may also elect to use one complete set of testing results to register multiple unique identification codes for products using an identical brake friction material formulation.

(d) Manufacturers of brake friction material are responsible for the accuracy of all information transmitted to the testing certification agency.

**Comment [SL14]:** Is this effectively trying to say that even if products have their own Part Number, so long as the Unique Identification Code is the same on the product then just registering that Unique Identification Code will automatically take care of all those various Part Numbers? That's how I read this and I believe that is in lockstep with the Washington Better Brake Rules.

**Comment 36**

NOTE: Authority cited: Health and Safety Code sections 25250.60 and 58012. Reference: Health and Safety Code section 25250.60.

### 66387.4 Testing Certification Agency for Brake Friction Material

Comment 38

The testing certification agency~~(ies)~~ shall serve as the official registration source for self-certified brake friction materials. The testing certification agency~~(ies)~~ shall post and maintain the self-certification of brake friction materials on the Internet which includes the unique identification code and the

Comment 39

Comment 40

~~manufacturer-name of the entity that registered the unique identification code.~~ The Department shall approve the certification requirements used by the "testing certification agency" to facilitate the acceptance of the marked proof of certification in all 50 states and United States territories in accordance with Health and Safety Code section 25250.60, subdivision (j).

Comment 41

#### (a) What accreditation does the testing certification agency need to meet?

The testing certification agency shall use accredited laboratories that meet the requirements of California Code of Regulations, title 22, section 66387.5. The testing certification agency shall be accredited in accordance with the requirements of either the ISO/IEC 17065:2012 standard or the ISO/IEC Guide 65:1996 standard. The accreditation must be issued by an accreditation body (AB), operating in accordance with ISO/IEC 17011:2005. The accreditation body shall be a signatory to the International Laboratory Accreditation Cooperation (ILAC) Arrangement for testing (ISO/IEC 17025) for accreditation of testing organizations or the International

**Comment [SL15]:** Added to specify that manufacturers can use a single test report to register multiple edge codes so long as those edge codes are all the same formulation. Test results used in such a way would still have to meet all of the reporting requirements in these Rules notably including section 66387.6(g).

**Comment 37**

**Comment [SL16]:** Changed because technically someone who is NOT the manufacturer (such as a distributor) can register the Unique Identification Code.

**Comment 40**

**Comment [SL17]:** Unsure what the quotes were denoting so I deleted them.

**Comment 41**

Accreditation Forum (IAF) Arrangement for product certification (ISO/IEC 17065) for accreditation of certification agencies. A testing certification agency shall be responsible for performing the following tasks:

- (1) Use chemical analysis data from an accredited laboratory that meets the requirements of California Code of Regulations, title 22, section 66387.5. If a testing certification agency uses an analytical laboratory that is accredited by a program not listed in California Code of Regulations, title 22, section 66387.5(a) ~~66387.5, subsection (a), then the testing certification agency shall follow the process outlined in California Code of Regulations, title 22, sections 66387.5(c), 66387.5(d), and 66387.5(e) 66387.5, subsection (b) thru (d) and obtain approval from the Department prior to using testing results from that analytical laboratory the brake friction material;~~
- (2) Receive confirmation from the analytical laboratory that the chemical analysis for each brake friction material formulation was conducted using the testing methodology in accordance with California Code of Regulations, title 22, section 66387.5(a) ~~66387.6, subsection (a).~~ If an analytical laboratory or manufacturer of brake friction material uses a chemical analysis testing method or chemical analysis sample processing not listed in California Code of Regulations, title 22, section 66387.6(a)(2) ~~66387.6, subsection (a)(2), then the testing certification agency shall request the analytical laboratory or manufacturer of the brake friction material provide the approval letter issued by the Department stating the alternative testing method was approved pursuant California Code of Regulations, title 22, section 66387.6(l) 66387.6, subsection (l);~~
- (3) Issue a self-certification of compliance to the brake friction material manufacturer for its formulation(s) and unique identification code(s) that complies with Health and Safety Code sections 25250.51, 25250.52, or 25250.53.
- (4) Publish all self-certifications on the Internet in accordance with Health and Safety Code section 25250.60, subdivision (h);
- (5) Assign the environmental compliance ~~marking level~~ in accordance with California Code of Regulations, title 22, section 66387.8 ~~66387.7, subsection (c)(3); and~~
- (6) Post on the Internet the ~~marked proof of certification environmental compliance level~~ marked on the brake friction material that follows the process outlined in California Code of Regulations, title 22, section 66387.7(c) ~~66387.7, subsection (c), with or without the two digits that indicate the year the brake friction material is produced.~~

- Comment 42
- Comment 43
- Comment 44
- Comment 45
- Comment 46
- Comment 47
- Comment 48
- Comment 49
- Comment 50
- Comment 51
- Comment 52
- Comment 53

- Comment 54
- Comment 55
- Comment 56
- Comment 57

**(b) What is the process for obtaining the Department's approval on for a testing certification agency's requirements?**

An organization interested in being a testing certification agency shall submit a request for approval to the Department on their brake friction material ~~certification registration~~ requirements in writing or electronically. The organization's registration requirements must always and continually meet all of the specifications and requirements in the California Code of Regulations, title 22, section 66387.4(b) even after the organization has been approved to be a testing certification agency. Even after being approved to be a testing certification agency the organization may not modify its requirements to be less stringent than the California Code of Regulations, title 22, section 66387.4(b) without prior approval from the Department.

The request shall include all of the following information:

- (1) Contact information for the organization requesting the approval including but not limited to the:
  - (A) Contact person's name; and

- Comment [SL18]:** Changed to list each specific section because I modified section 66387.5 and inserted a new subsection 66387.5(b).
- Comment 43**
- Comment [SL19]:** Modified because the way I originally read it implied that the Testing Certification Agency was the one performing the testing.
- Comment 44**
- Comment [SL20]:** Changed what section this references because 66387.7(c)(3) is in regards to the entire marking (Unique Identification Code and Environmental Compliance Marking). But the Testing Certification Agency is only assigning the Environmental Compliance Level. The TCA is not assigning the entire Environmental Compliance Marking. This is what is effectively stated by California in section 66387.4(a)(6) (due to the phrase "with or without the two digits that indicate the year the brake friction material is produced") even before my modifications of that section. Otherwise, if only the Environmental Compliance Level is publicly posted (as stated in 66387.4(a)(6)) then what action is required by the Testing Certification Agency to "assign ...
- Comment [SL21]:** Changed this because being required to post the "marked proof of certification" would require the Testing Certification Agency post the marks described in 66387.1(j)(2). In other words, the TCA would have to post the LeafMarks. I'm unsure if California actually wants to require the TCA post copies of the LeafMarks.
- Comment 52**
- Comment [SL22]:** Within section 66387.4(b), changed references from "certification" to "registration" because the process that the TCA is requesting approval for can be described as a registration process for a manufacturer's self-certification. But the TCA does not have a certification process that is being approved since this is a [manufacturer] self-certification program. ...
- Comment [SL23]:** Added this section as it is possible to interpret the original rule as saying that the Request must meet the requirements below but after becoming an approved TCA the organization can loosen/change its restrictions such that the program is no longer compliant with these original requirements.
- Comment 57**

- (B) Contact person's job title; and
- (C) Contact person's e-mail address; and
- (D) Business name; and
- (E) Business address; and
- (F) Business phone number

Comment 58

(2) The organization's brake friction material ~~certification~~-registration request for approval must include copies of the organization's:

- (A) Certificate of Conformity Accreditation for either:
  1. ISO/IEC 17065:2012; or
  2. ISO/IEC Guide 65:1996

Comment 59  
Comment 60

(B) Standard Operating Procedures for Material and/or Product ~~Certification~~Registrations;

(C) Proposed brake friction material ~~certification~~-registration process including but not limited to:

1. Copy of the chemical analysis testing method and chemical analysis sampling process that meets the requirements in California Code of Regulations, title 22, section 66387.6;
2. Copy of the procedures describing the quality assurance procedures for checking testing results and rejecting testing results that are not within the quality control limits;
3. A specification that the earliest date (Registration Start Date) that a formulation's unique identification code(s) may be registered using a set of test results is the date on which that specific testing was completed;
4. A specification that the latest date (Registration End Date) that a formulation's unique identification code(s) may be registered using a set of test results is three (3) years after the date on which that specific testing was completed. Recertification cycle for each certified brake friction material is performed at least every 3 years under this program. When recertifying brake friction materials, manufacturers of brake friction materials must submit updated self-certification documentation and new laboratory testing results. However,
  - a. The proposed brake friction material registration process must allow brake friction materials containing more than five percent copper by weight, but that meet the requirements for the constituents listed in California Health and Safety Code section 25250.51, subdivisions (a)(1) through (a)(5), do not need to have a Registration End Date of December 31, 2020 even if such a Registration End Date causes the difference between the Registration Start Date and Registration End Date to exceed three (3) years. submitted for new testing to be recertified prior to 2021;
5. A requirement that if manufacturers of brake friction materials re-register a formulation's unique identification code(s) that were previously registered through a testing certification agency, the manufacturer of brake friction materials must submit updated self-certification documentation and new laboratory testing results.

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Comment 67

**Comment [SL24]:** Effectively moved this requirement to section 66387.4(b)(2)(C)5  
**Comment 63**  
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- 3.6. Copy of the procedure used to ensure every self-certified brake friction material formulation has a unique identification code;
- 4.7. Copy of the proposed manufacturer declaration of Self-Certification of Compliance;
- 5.8. Copy of the proposed format for the marked proof of certification that meets the requirements in California Code of Regulations, title 22, section 66387.7;
- 6.9. Copy of the procedure regarding self-certification information on brake friction materials on their website. This includes, but is not limited to, the list of self-certified materials, description of the registration procedures, date of the last update of the list of registered materials, description and graphics illustrating the marked proof of certification on the pad and packaging logo.
- 7.10. Internet address where all self-certifications will be published and available to the public at no cost; and
- 8.11. Copy of the trademark for a packaging logo if one is issued by the testing certification agency.

Comment 68

(D) Copy of the certification credentials for the chemical analysis laboratory(ies) used by the testing certification agency

(3) An organization may submit a request for approval of certification agency requirements by either of the following methods:

- (A) For an electronic submittal, a person shall send the request to the Department via electronic mail (brakepad@dtsc.ca.gov) on the Department's website at <http://www.dtsc.ca.gov> with the words "Attention: California Brake Pad Testing Certification Agency Request" displayed in the subject line of the electronic mail; or
- (B) For written submittal, a person shall send the request to the Department via certified mail, return receipt requested, at the following address: Department of Toxic Substances Control, Safer Products and Workplaces Program, P.O. Box 806, Sacramento, CA 95812-0806, with the words "Attention: California Brake Pad Testing Certification Agency Request" prominently displayed on the front of the envelope.

(c) How will the Department notify a testing certification agency that their certification agency requirements have been approved by the Department?

The Department shall notify the testing certification agency in writing of its determination of approval or denial within 90 days of receipt of the request. If the Department finds the testing certification agency requirements meet California Code of Regulations, title 22, section 66387.4(a) ~~66387.4, subsection (a)~~, then a letter will be sent to the testing certification agency that provides details on the basis of the approval. If the Department does not find the testing certification agency requirements meet subsection 66387.4(a) ~~of this section~~, then the letter will list the reasons the certification agency requirements did not meet subsection 66387.4(a) ~~of this section~~. Testing certification agencies approved by the Department shall be posted on the Department's Web page at <http://www.dtsc.ca.gov>.

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After a testing certification agency has been approved by the Department, the testing certification agency does not need to resubmit the document specified by the California Code of Regulations, title 22, section 66387.4(b)(2)(D) ~~66387.4, subsection (b)(2)(E)~~ for additional laboratories to be used by the testing certification agency, if the additional analytical

Comment 72

Comment [SL25]: I think there was a typo in this reference - 66387.4(b)(2)(E) does not exist.  
Comment 72

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Comment 76

laboratories comply with the requirements in subsection 66387.5(d)(2) ~~66387.5(c)(2)~~. The testing certification agency does not need to resubmit changes to the documentation and procedures described in the California Code of Regulations, title 22, sections 66387.4(b)(2)(B) and 66387.4(b)(2)(C) so long as those changed documents continue to comply with all requirements of the California Code of Regulations, title 22, section 66387.4.

NOTE: Authority cited: Health and Safety Code sections 25250.60 and 58012. Reference: Health and Safety Code section 25250.60.

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Comment 88

**66387.5 Accredited laboratories for testing brake friction materials**

**(a) What accreditation does the analytical laboratory need to meet?**

To self-certify compliance, a manufacturer of brake friction material shall ensure that its brake friction material is tested by a laboratory that is qualified and equipped for testing products in accordance with the SAE J 2975:DECEMBER2013, and maintains accreditation to one of the following:

- (1) ISO/IEC 17025:2005 from a laboratory accreditation body that is a signatory to the International Laboratory Accreditation Cooperation Multilateral Recognition Arrangement, as of the effective date of this chapter. The laboratory's scope of accreditation to ISO/IEC 17025:2005 shall encompass one of the following:

(A) Both of the following:

- 1. SAE J2975:DEC2013; and
- 2. testing to All of the necessary test method(s) listed in SAE J 2975:DECEMBER2013, or

~~(A)(B) an alternate testing method approved under California Code of Regulations, title 22, section 66387.6(l) ~~66387.6, subsection (l)~~; or~~

- (2) Any accreditation body that is recognized by the National Environmental Laboratory Accreditation Program, as of the effective date of this chapter.

**(+)(b) May an analytical laboratory subcontract some of the testing required to be performed?**

A laboratory may subcontract part of the testing described in the California Code of Regulations, title 22, section 66387.5(a) to any lab which has the test(s) being performed by the subcontract laboratory on either of the following scopes of accreditation:

- (1) ISO/IEC 17025:2005 from a laboratory accreditation body that is a signatory to the International Laboratory Accreditation Cooperation Multilateral Recognition Arrangement, as of the effective date of this chapter; or
- (2) Any accreditation body that is recognized by the National Environmental Laboratory Accreditation Program, as of the effective date of this chapter.

Utilizing the California Code of Regulations, title 22, section 66387.5(b) shall not absolve the original analytical laboratory from being responsible from the test results derived from the subcontract laboratory.

If all three (3) conditions described in the California Code of Regulations, title 22, sections 66387.5(b)(3), 66387.5(b)(4), and 66387.5(b)(5) are met then the test results shall be considered to meet the requirements of the California Code of Regulations, title 22, section 66387.5(a). The requirements are:

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Comment [SL26]: Made this change to make it a little clearer than labs opting to have SAE J2975:DEC2013 on their scope must also have all other test methods listed in SAE J2975:DEC2013 on their scope.

The word "necessary" is important because SAE J2975:DEC2013 includes some options on what test methods to use. Therefore, it's possible not to have ALL of the test methods references in SAE J2975:DEC2013 on a lab's scope of accreditation but to have all of the NECESSARY test methods.  
Comment 82

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Comment [SL27]: Added this section so that it's clear labs have the ability to subcontract out testing work.  
Comment 86

Comment 88

- (3) The original analytical laboratory subcontracts testing to appropriate subcontract laboratories meeting the requirements defined in the California Code of Regulations, title 22, section 66387.5(b); and
- (4) The original analytical laboratory performs all testing which was not subcontracted via the method specified in the California Code of Regulations, title 22, section 66387.5(b)(3); and
- (5) The testing performed by the original analytical laboratory described in the California Code of Regulations, title 22, section 66387.5(b)(4) is on the either of the scopes of accreditation described in the California Code of Regulations, title 22, sections 66387.5(b)(1) or 66387.5(b)(2).

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(2) \_\_\_\_\_  
 (b)(c) **May an alternative laboratory accreditation not listed in California Code of Regulations, title 22, section 66387.5(a) ~~66387.5, subsection (a)~~ be used?**

A manufacturer of brake friction material, laboratory, or laboratory accreditation body may self-certify compliance with Health and Safety Code section 25250.51, 25250.52, or 25250.53 using testing results generated by a laboratory accredited to an alternative laboratory accreditation not listed in ~~subsection (a) of this section~~ section 66387.5(a) if the alternative laboratory accreditation is approved by the Department in advance of testing results being used for certification. The manufacturer of brake friction material, laboratory, or laboratory accreditation body that requests the Department consider an alternative laboratory accreditation not listed in ~~subsection (a) of this section~~ section 66387.5(a) shall be responsible to demonstrate to the Department that the alternative laboratory accreditation is equivalent to or better than the standards or laboratory accreditation programs listed in ~~subsection (a) of this section~~ section 66387.5(a). Once an alternative laboratory accreditation has been approved by the Department in accordance with California Code of Regulations, title 22, section 66387.5(e) ~~66387.5, subsection (d)~~, any brake friction material manufacturer, laboratory, or laboratory accreditation body may use the alternative laboratory accreditation for certification.

The alternative laboratory accreditation may be used to modify the requirements of the California Code of Regulations, title 22, section 66387.5(b).

(c)(d) **What is the process for requesting the Department to approve an alternative laboratory accreditation not listed in California Code of Regulations, title 22, section 66387.5(a) ~~66387.5, subsection (a)~~?**

A manufacturer of brake friction materials, laboratory, or laboratory accreditation body may submit a request for approval on an alternative laboratory accreditation in writing or electronically. The request shall include the following information:

- (1) Contact information for the organization requesting the approval including but not limited to the:
  - (A) Contact person's name; and
  - (B) Contact person's job title; and
  - (C) Contact person's e-mail address; and
  - (D) Business name; and
  - (E) Business address; and
  - (F) Business phone number
- (2) A copy of the alternative laboratory accreditation standard or the proficiency testing procedures for the laboratory accreditation program
- (3) A manufacturer of brake friction material, laboratory, or laboratory accreditation body may submit a request for an approval of an alternate laboratory accreditation by either of the following methods:

**Comment [SL28]:** Added this entire section so it would be clearly defined that appropriately utilizing a subcontract lab means the original lab is considered to be meeting the requirements of section 66387.5(a). There may be a simpler way to revise these sections to give the same result.  
**Comment 88**

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**Comment [SL29]:** Added this so there is clearly a method to modify the requirements of 66387.5(b).  
**Comment 95**

- (A) For an electronic submittal, a person shall send the request to the Department via electronic mail (brakepad@dtsc.ca.gov) on the Department's website at <http://www.dtsc.ca.gov> with the words "Attention: California Brake Pad Alternative Laboratory Accreditation Request" displayed in the subject line of the electronic mail; or
- (B) For a written submittal, a person shall send the request to the Department via certified mail, return receipt requested, at the following address: Department of Toxic Substances Control, Safer Products and Workplaces Program, P.O. Box 806, Sacramento, CA 95812-0806, with the words "Attention: California Brake Pad Alternative Laboratory Accreditation Request" prominently displayed on the front of the envelope.

(d)(e) How will the Department notify a manufacturer of brake friction material, laboratory, or laboratory accreditation body that an alternative laboratory accreditation has been approved?

The Department shall notify the manufacturer of brake friction material, the laboratory, or the laboratory accreditation body in writing as to whether the alternative laboratory accreditation has been approved within 90 days of receipt of the request. If the Department finds the alternative laboratory accreditation is equivalent to or better than those listed in California Code of Regulations, title 22, section 66387.5(a) ~~66387.5, subsection (a)~~, the Department shall provide the basis of the approval. If the Department does not find the alternative laboratory accreditation equivalent to or better than those listed in ~~subsection (a) of this section~~ section 66387.5(a), the Department shall provide the reasons in writing for the denial. The alternative laboratory accreditation approved by the Department shall be posted on the Department's Web page at <http://www.dtsc.ca.gov>.

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NOTE: Authority cited: Health and Safety Code sections 25250.60 and 58012. Reference: Health and Safety Code section 25250.60.

**66387.6 Testing methodology and maximum concentrations of regulated constituents and copper for brake friction materials**

- (a) The manufacturer of brake friction material offered for sale in California shall ensure that its brake friction materials sold or offered for sale in California are tested:
  - (1) By a laboratory accredited in accordance with California Code of Regulations, title 22, section 66387.5; and
  - (2) Using the testing protocol SAE J 2975:DECEMBER2013 or an alternative testing method approved under ~~subsection (f) of this section~~ section 66387.6(l).
- (b) Manufacturers of brake friction material shall ensure that brake friction material is tested for each of the following:
  - (1) Asbestiform fibers;
  - (2) Cadmium and its compounds;
  - (3) Chromium (VI)-salts;
    - (A) The total chromium in a brake friction material may be tested and assumed to be entirely composed of chromium (VI)-salts. Therefore if the amount of total chromium is within the chromium (VI)-salts allowable range, specified Chromium (VI)-salts testing is not required
  - (4) Copper and its compounds;
  - (5) Lead and its compounds; and

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(6) Mercury and its compounds.

**(c) Who is responsible for the accuracy of laboratory testing results?**

The analytical laboratory is responsible for the accuracy of the test results reported to the testing certification agency. The manufacturer of brake friction material is responsible to confirm the concentrations of regulated constituents and copper reported correspond to the concentrations known to be in their brake friction material formulations prior to the analytical laboratory reporting these testing results to the testing certification agency.

Comment 102  
Comment 103

**(d) What are the maximum concentrations for the regulated constituents and copper in brake friction materials that must be self-certified?**

To be used for self-certification, the cumulative average of all testing data must show that the brake friction material does not exceed the following concentrations:

- (1) 0.01 percent by weight for cadmium and its compounds;
- (2) 0.1 percent by weight for each of these individual constituents:
  - (A) ~~asbestiform~~ Asbestiform fibers; and,
  - (B) ~~chromium~~ Chromium(VI)-salts; and,
  - (C) ~~lead~~ Lead and its compounds; and
  - (~~2~~) (D) ~~mercury~~ Mercury and its compounds;

Comment 104

Formatted: Heading 4, Level 4: (A)

Comment [SL30]: Changed the formatting of this to make it clear that the 0.10wt% requirement is specific to each individual constituent rather than saying that the TOTAL of asbestos, Cr(VI), Pb, and Hg must be less than 0.10wt%.  
Comment 104

- (3) 5.0 percent by weight of copper and its compounds after January 1, 2021; and
- (4) 0.5 percent by weight of copper and its compounds after January 1, 2025.

**(e) How many times does each friction material need to be tested?**

All testing for the regulated constituents and copper must be done at least in triplicate.

- (1) Due to the margin of error in the test method, additional testing may be required to demonstrate that the brake friction material does not exceed the concentrations listed for each of the regulated constituents and copper in Health and Safety Code sections 25250.51, 25250.52, and 25250.53. Cumulative average of all testing results conducted on a specific brake friction material must meet the applicable requirements of the subsection (d) of this section.
  - (A) For example, if a pad contains 4.9 percent copper, the first round of testing results could come back showing the average testing result is greater than 5.0 percent copper by weight. Consequently, these results would not be suitable for demonstrating compliance and the brake friction material would need to be retested in accordance with SAE J 2975:DECEMBER2013.
- (2) If an approved alternative testing method or protocol is used, all testing must be done in accordance with the alternative testing method and must be done at least in triplicate.

**(f) How must laboratory testing results be reported to the Department?**

No results are reported to the Department.

**(g) What information must be reported to the testing certification agency?**

The analytical laboratories shall transmit all laboratory testing results for a brake friction material directly to a testing certification agency.

Comment 105

- (1) The only test results which do not have to be reported to the testing certification agency are those test results determined to be laboratory error as specified in section 66387.6(h). All other test results derived from a single set of friction material samples must be reported to the testing certification agency on a single report. All such results must be reported to the testing certification agency at the same time.

(A) Any reporting methodology which does not meet the specifications of section 66387.6(g)(1) would be considered an alternate testing method and require approval under section 66387.6(l) prior to using it for self-certification.

Comment 106  
Comment 107

(1)(2) Testing reports transmitted from the laboratory to the testing certification agency must include the minimum information specified in SAE J 2975:DECEMBER2013.

(A) If an alternate method of testing approved under subsection (l) of this section section 66387.6(l) is used to perform testing and that alternate method specifies the minimum reporting information, then test reports transmitted from the laboratory to the testing certification agency shall include the minimum information specified in the alternate method of testing utilized.

Comment 108  
Comment 109

(2)(3) In addition to reporting the cumulative average for each regulated constituent and copper listed in this subsection, the testing laboratory shall either perform a comparison between the cumulative average and the concentrations listed under this subsection or specify the environmental compliance level indicated by the report. This comparison shall report whether the cumulative average concentration does not exceed the following concentrations:

- (A) 0.01 percent by weight for cadmium and its compounds;
- (B) 0.1 percent by weight for chromium (VI)-salts, lead and its compounds, mercury and its compounds, and asbestiform fibers;
- (C) 5.0 percent by weight of copper on and after January 1, 2021, and
- (D) 0.5 percent by weight of copper on and after January 1, 2025.

**Comment [SL31]:** Added this section because without the ability to just put down A, B, or N I'm unsure what it would practically look like for the TCA to "perform a comparison" and have that comparison result be written out on the report. Ultimately, manufacturers just want to be advised as to what Environmental Compliance Level (A, B, or N) their report reaches.  
**Comment 109**

**(h) What happens if laboratory error occurs?**

If laboratory error is suspected, the laboratory may, at its discretion and in accordance with its standard operating procedures, choose to retest the brake friction material. The results from the testing in which the error occurred ~~do~~ shall not ~~need to be~~ included in the testing results transmitted to the testing certification agency.

Comment 110  
Comment 111

- (1) Laboratory error may include incorrect samples being initially submitted to the laboratory for testing.
- (2) If the laboratory previously submitted results to a testing certification agency and the laboratory later determines any of those results were laboratory error then the laboratory shall be required to inform the testing certification agency within 4 calendar days of the determination that the test results were laboratory error. The testing certification agency may then be required to withdraw registration of specific unique identification codes until such time as new testing without laboratory error is properly provided to the testing certification agency which warrants the unique identification codes being properly registered.

**Comment [SL32]:** Modified this so that it is not an option to include laboratory error results.  
**Comment 110**  
**Formatted: Heading 3, Level 3: (1)**

**(i) How long must a manufacturer of brake friction material retain copies of laboratory testing results used for self-certification?**

Comment 112  
Comment 113

A manufacturer of brake friction materials shall maintain copies of laboratory testing results for a period of at least ten (10) years after the date of self-certification.

**(j) May a manufacturer of brake friction material self-certify compliance using testing results derived using an alternative testing method?**

Comment 114

A manufacturer of brake friction material may use an alternative testing method if the alternative testing method is approved by the Department under subsection (k) of this section section 66387.6(k), in advance of use for self-certification. Once an alternative testing method has been approved by the Department, any manufacturer of brake friction material may use the approved alternative testing method for certification. The Department shall only approve an alternative testing method:

- (1) When an alternative testing method is proposed by at least one of the following:
  - (A) Manufacturer of brake friction material; or

Comment 115

(B) Testing certification agency approved by the Department under California Code of Regulations, title 22, section 66387.4(c) ~~66387.4 subsection (e)~~; or

Comment 116

(C) A testing laboratory used by a testing certification agency approved by the Department under California Code of Regulations, title 22, section 66387.4(c) ~~66387.4 subsection (e)~~.

Comment 117

(2) When the entity proposing an alternative testing method has submitted information to the Department in accordance with ~~subsection (k)~~ section 66387.6(k);

Comment 118

(3) When the alternative testing method does not involve alterations to the sample preparation method outlined in SAE J 2975:DECEMBER2013 section 4.1, and

(4) When the proposed alternative testing method is publicly available.

**(k) What is the process for requesting the Department to approve an alternative testing method for chemical analysis testing or chemical analysis sampling processing?**

An entity may submit a request for approval on an alternative testing method in writing or electronically. The request must include the following information:

(1) Contact for:

(A) The entity requesting the approval; and

(B) The manufacturer(s) of brake friction materials whose products were used to gather evidence proving the alternate proposed method is equivalent or better than SAE J 2975:DECEMBER2013; and

(C) The laboratory(ies) which performed the testing; and

(D) The laboratory accreditation body(ies) which accredited the lab under the California Code of Regulations, title 22, section 66387.5(a) ~~66387.5 subsection (a)~~.

Comment 119

(2) A copy of the proposed alternative testing method

(3) A copy of the Standard Operating Procedure for the alternative testing method

(A) If the alternative testing method is a standard or reference method, a demonstration of capability package must be submitted as outlined in the NELAC Institute Standard, Module 4: Quality Systems for Chemical Testing.

(B) If the testing method is a non-standard or reference method, then a validation package must be submitted as outlined in the NELAC Institute Standard, Module 4: Quality Systems for Chemical Testing.

(4) A certificate signed by the Laboratory Director that the proposed alternative testing method(s):

(A) Is equivalent or better than SAE J 2975:DECEMBER2013; and

(B) Is suitable for analyzing the components identified in Health and Safety Code sections 25250.51, 25250.52, and 25250.53.

Comment 121

Comment 122

(5) A copy of the data used by the Laboratory Director to determine that the proposed alternative testing method is equivalent or better than SAE J 2975:DECEMBER2013.

(6) A manufacturer of brake friction material, the testing certification agency, or the testing laboratory may submit a request for approval of an alternate testing method by either of the following methods:

(A) For an electronic submittal, a person shall send the request to the Department via electronic mail (brakepad@dtsc.ca.gov) on the Department's website at <http://www.dtsc.ca.gov> with the words "Attention: California Brake Pad Alternative Testing Method Request" displayed in the subject line of the electronic mail; or

(B) For a written submittal, a person shall send the request to the Department via certified mail, return receipt requested, at the following address: Department

Comment 123

Comment 124

of Toxic Substances Control, Safer Products and Workplaces Program, P.O. Box 806, Sacramento, CA 95812-0806, with the words "Attention: California Brake Pad Alternative Testing Method Request" prominently displayed on the front of the envelope.

**(l) How will the Department notify a requestor that an alternative testing method has been approved?**

The Department shall notify the manufacturer of brake friction material, testing certification agency, or testing laboratory in writing whether the alternative testing method was approved within 90 days of receiving the request. If the Department finds the alternative testing method is equivalent to or better than SAE J 2975:DECEMBER2013 the Department shall provide the basis of the approval. If the Department does not find the alternative testing method equivalent to or better than SAE J 2975:DECEMBER2013 the Department shall provide the basis for the denial. The alternative testing method approved by the Department shall be posted on the Department's Web page at <http://www.dtsc.ca.gov>.

Comment 125  
 Comment 126  
 Comment 127

NOTE: Authority cited: Health & Safety Code sections 25250.60 and 58012. Reference: Health and Safety Code section 25250.60.

**66387.7 Marked proof of self-certification**

**(a) What is marked proof of self-certification?**

Marked proof of self-certification is the unique identification code and environmental compliance marking that is marked on the brake friction material, described in SAE J 866:JUL2012, and the self-certification mark that appears on the brake friction material packaging. The self-certification mark on the brake friction material packaging serves to notify end users that the product is compliant with the law. While the unique identification code and environmental compliance marking is used to link the product to laboratory testing results and self-certification documentation, together, the unique identification code, environmental compliance marking, and self-certification mark provide proof that the brake friction material meets the requirements of Health and Safety Code sections 25250.51, 25250.52, or 25250.53. When a brake friction material manufacturer marks a brake friction material and its packaging with the marked proof of self-certification the manufacturer is self-certifying that:

- (1) The brake friction material meets the applicable criteria for the environmental compliance marking, described in California Code of Regulations, title 22, section 66387.8, with which it has been marked;
- (2) ~~The brake friction material has been registered with testing certification agency~~ On the date the brake friction material was manufactured the unique identification code was registered with an approved testing certification agency; and
- (3) Self-certification documentation has been submitted to ~~the~~ an approved testing certification agency and is available on ~~their~~ the testing certification agency's website.

The Department shall post self-certification marks recognized by the Department on the department's website at <http://www.dtsc.ca.gov>.

**(b) When must brake friction material and its packaging be marked?**

On the effective date of these regulations, brake friction material and its packaging sold or offered for sale in California shall be marked with the marked proof of self-certification.

**(c) How must brake friction material be marked?**

A manufacturer of brake friction material shall:

Comment 127  
 Comment 128  
 Comment 129  
 Comment 130  
 Comment 131  
 Comment 132  
 Comment 133 and 134  
 Comment 135  
 Comment 136  
 Comment 137  
 Comment 138  
 Comment 139

**Comment [SL33]:** Modified to make it clear that when the manufacturer marks their product as self-certified it means the product was appropriately registered at the time it was registered.

Thus just registering the Unique Identification Code after the product was manufactured is not good enough. And, even if the Unique Identification Code was registered before the product was manufactured but the Unique Identification Code loses its registration for some reason (such as the 3-year limit expiring without the Unique Identification Code being re-registered) then that also is not good enough. The Unique Identification Code must be actively registered by the manufacturer on the date the marked product was actually manufactured.

**Comment 135**

Comment 140

Comment 141

Comment 142

- (1) Mark its brake friction material in accordance with the SAE J 866:JUL2012. This chapter does not require brake friction material manufacturers to mark the hot and cold coefficients of friction as specified in the SAE J 866:JUL2012. Note: These markings are included in the SAE J 866:JUL2012 standard because other states ~~have~~ may regulations that require brake friction materials to be marked with the hot and cold coefficients of friction.
- (2) Ensure the unique identification code reported to ~~the~~ an approved testing certification agency is the same as the code marked on brake friction material in accordance with SAE J 866:JUL2012;
- (3) Ensure that the brake friction material's marked proof of self-certification includes a unique identification code and the appropriate environmental compliance marking for the requirements cited in Health and Safety Code sections 25250.51, 25250.52, and 25250.53. This marking is also described in SAE J 866:JUL2012;
- (4) Mark its brake friction material with the last two digits of the year the material was manufactured as described in SAE J 866:JUL2012; and
- (5) Ensure that the marking on the brake friction material is legible.

Comment [SL34]: Changed because I am unsure if any states actively have regulations requiring hot & cold friction coefficients be marked.

**(d) How shall the brake friction material packaging be marked?**

Comment 143

Comment 144

Comment 145

Comment 146

Brake friction material packaging shall be marked with a self-certification mark that is issued by ~~the~~ an approved testing certification agency and provided in the proposed brake friction material ~~certification registration~~ process in accordance with California Code of Regulations, title 22, section 66387.4(b)(2)(C) ~~66387.4, subsection (b)(2)(C)~~. This packaging mark self-certifies that the brake friction material contained in the package meets the requirements of Health and Safety Code section 25250.51, 25250.52, or 25250.53.

NOTE: Authority cited: Health and Safety Code sections 25250.60 and 58012. Reference: Health and Safety Code section 25250.60.

**66387.8 Environmental compliance marking**

**(a) What is the environmental compliance marking?**

Comment 147

~~The environmental compliance marking is defined in the California Code of Regulations, title 22, section 66387.1(h). It~~ The environmental compliance marking is the last letter marked on brake friction materials followed by the two digit year of manufacture. It must be an "A," "B," or "N" ~~and it~~ allows a person to determine the level of environmental compliance of the brake friction material

Comment 148

**(b) What does the environmental compliance marking level "A" indicate?**

An "A" indicates that the brake friction material manufacturer has submitted self-certification documentation and laboratory testing results showing the brake friction material does not contain any of the following regulated constituents in amounts exceeding the following concentrations:

Comment [SL35]: Changed this because the Environmental Compliance Marking is not just A, B, or N (because the Environmental Compliance Marking include the 2-digit year of manufacture).  
Comment 148

Regulated Constituent	Concentration Not to Exceed
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
Mercury and its compounds	0.1 percent by weight

Comment 149

**(c) What does the environmental compliance marking level "B" indicate?**

A "B" indicates that the brake friction material manufacturer has submitted self-certification documentation and laboratory testing results showing the brake friction material does not contain any of the constituents listed in this subsection in amounts exceeding the following concentrations:

Regulated Constituent	Concentration Not to Exceed
Asbestiform fibers	0.1 percent by weight
Cadmium and its compounds	0.01 percent by weight
Chromium (VI)-salts	0.1 percent by weight
Copper and its compounds	5.0 percent by weight
Lead and its compounds	0.1 percent by weight
Mercury and its compounds	0.1 percent by weight

Comment 150

**(d) What does the environmental compliance marking level "N" indicate?**

An "N" indicates that the brake friction material manufacturer has submitted self-certification documentation and laboratory testing results showing the brake friction material does not contain any of the constituents listed in this subsection in amounts exceeding the following concentrations:

Regulated Constituent	Concentration Not to Exceed
Asbestiform fibers	0.1 percent by weight
Cadmium and its compounds	0.01 percent by weight
Chromium (VI)-salts	0.1 percent by weight
Copper and its compounds	0.5 percent by weight
Lead and its compounds	0.1 percent by weight
Mercury and its compounds	0.1 percent by weight

NOTE: Authority cited: Health and Safety Code sections 25250.60 and 58012. Reference: Health and Safety Code sections 25250.51, 25250.52, 25250.53, and 25250.60.

**66387.9 Extension Process**

**(a) How does a manufacturer apply for an extension to the January 1, 2025, deadline established in Health and Safety Code section 25250.53?**

(1) To apply for an extension on or after January 1, 2019, a manufacturer shall submit an extension application, electronically or in writing, to the Department with the following information:

- (A) Contact information for the manufacturer requesting an extension
- (B) Information on the affected vehicles including the vehicle model, class, platform, or other vehicle-based category that includes:
  1. Identification of the brake friction material associated with each vehicle model, class, platform, or other vehicle-based category on the extension application.
    - a. Identification of whether the brake friction material is intended for use in original equipment or replacement parts
  2. Identification of the brake pads and brake drums associated with each vehicle model, class, platform, or other vehicle-based category on the extension application that includes:
    - a. Brand name(s) of the brake pad and/or brake drum; and
    - b. Part number(s) of the brake pad and/or brake drum; and

- c. Identification on whether the brake pad and/or brake drum is original equipment or a replacement parts
  - (C) The type and length of extension request (initial or renewal)
    - 1. For an initial extension request, the manufacturer shall indicate the length of time for the requested extension as either one (1), two (2), or three (3) years.
    - 2. For a renewal of an existing extension request, the amount of time shall be two (2) years.
  - (D) Documentation that supports the need for an extension. A manufacturer shall provide all of the following information:
    - 1. An estimate on the quantity of copper that would be emitted if the extension is granted in accordance with Health and Safety Code sections 25250.54, subdivision (a)(4), and
    - 2. The assessment of "safe and available" alternatives in accordance with Health and Safety Code section 25250.54, subdivision (e)(3).
- (2) The application process.
  - (A) The Department shall process the application in accordance with Health and Safety Code section 25250.54, subdivision (b) and (c).
  - (B) The advisory committee shall process the application in accordance with Health and Safety Code section 25250.54, subdivision (d) through (f); and
  - (C) The Secretary shall make a determination in accordance with Health and Safety Code section 25250.54, subdivision (g).
- (3) A manufacturer may submit a request for an extension by either of the following methods:
  - (A) For an electronic submittal, the person shall send the request to the Department via the electronic mailbox (brakepad@dtsc.ca.gov) on the Department's website at <http://www.dtsc.ca.gov> with the words "Attention: California Brake Pad Extension Request" displayed in the subject line for the electronic mail, or
  - (B) For a written submittal, the person shall send the request to the Department via certified mail, return receipt requested, at the following address: Department of Toxic Substances Control, Safer Products and Workplaces Program, P.O. Box 806, Sacramento, CA 95812-0806, with the words "Attention: California Brake Pad Extension Request" prominently displayed on the front of the envelope.
- (4) The department shall post the following information on its website at <http://www.dtsc.ca.gov> for all extension applications received:
  - (A) The name of the applicant; and
  - (B) The vehicle model, class, platform, or other vehicle-based category; and
  - (C) The brand name of the brake pad and/or brake drum; and
  - (D) The part number of the brake pad and/or brake drum; and
  - (E) Whether the extension was approved or denied.
- (b) **How does a manufacturer renew an extension to the January 1, 2025 deadline established in Health and Safety Code section 25250.53?**

The brake friction material manufacturer may submit another extension application in accordance with California Code of Regulations, title 22, section 66287.9(a) ~~66287.9, subsection (a)~~.

The documentation to renew an extension shall include information on the original

Comment 151

extension that was approved by the Secretary along with a description and any additional documentation explaining the need for the extension.

**(c) Who is eligible to apply for an extension to the January 1, 2025 deadline established in Health and Safety Code section 25250.53?**

Comment 152

A manufacturer as defined in California Code of Regulations, title 22, section 66387.1(i) ~~66387.1, subsection (h)~~ may apply for an extension to the January 1, 2025 deadline.

**(d) Will the Department charge a processing fee? How will the fee be calculated?**

Under Health and Safety Code section 25250.54, subdivision (j), the Department shall assess a fee for each extension application to cover actual costs incurred in implementing the extension process. The fee shall include costs incurred:

- (1) For appointing the advisory committee;
- (2) By each advisory committee member for travel and meetings held;
- (3) By the department overseeing, coordinating, reviewing, and preparing support documentation for an extension application;
- (4) By California Air Resources Board reviewing an extension application and any support documentation;
- (5) By the State Water Resources Control Board reviewing an extension application and any support documentation; and
- (6) By the California Environmental Protection Agency reviewing, approving, or disapproving an extension application.

NOTE: Authority cited: Health and Safety Code sections 25250.54 and 58012. Reference: Health and Safety Code section 25250.54.

**Comment [SL36]:** Should rules be added regarding enforcement and penalties? This would be related Health and Safety Code section 25250.62.

This would mirror the last section (173-901-180) of the Washington Better Brake Rules.  
**Comment 153**

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**Davis, Suzanne@DTSC**

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**From:** Susan Hazen <sbhazeninc@verizon.net>  
**Sent:** Tuesday, April 19, 2016 11:03 AM  
**To:** Davis, Suzanne@DTSC  
**Subject:** Question regarding brake pad regulations

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Comment #1

The proposed regulations appear to be silent on the issue of what is required of an importer of an automobile regarding this rulemaking. Can you tell me what due diligence is expected for an automobile importer in terms of checking the markings on friction material already in the automobile.

Thank You

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**Response to Comments**  
**Hazardous Materials: Motor Vehicle Brake Friction Materials**  
**45-day Comment Period**  
**(April 8 - May 23, 2016)**

The document is organized into the following sections: [General Comments](#), [Editorial comments](#), and [Comments by Regulation Section](#). The Comments by Regulation Section are grouped as follows:

[66387.1 Definitions](#),

[66387.3 Self-Certification of Compliance](#),

[66387.4 Testing Certification Agency for Brake Friction Materials](#),

[66387.5 Accredited Laboratories for Brake Friction Materials](#),

[66387.6 Testing Methodology and Maximum Concentrations of Regulated Constituents and Copper for Brake Friction Materials](#);

[66387.7 Marked Proof of Certification](#), and

[66387.8 Environmental Compliance Marking](#).

To make navigating in this document easier, hyperlinks have been added to each section listed above. These hyperlinks will take you to the section of interest.

### **General Comments**

Several comments were received on topics not covered in the regulations. These topics pertain to enforcement, due diligence by automobile importers, exemption markings, and clarification on specific exemptions found in law.

#### ***Clarification on Exemptions Listed in Health and Safety Code sections 25250.55(g) and (h)***

Comment letter 1, Comment 1

Comment letter 8, Comment 1, 7 and 8

Commenters request clarification on the exemption language in Health and Safety Code (HSC) section 25250.55(g) and 25250.55(h). Specifically, commenters wanted the Department to clarify that these exemptions apply to both brake friction materials manufactured under an original equipment service (OES) contract and as an aftermarket replacement part.

**Response:** This comment is outside the scope of these regulations and will not be addressed. However, the Department has provided an explanation below regarding the requested change since the one commenter also requested adding two new definitions in

the regulations: one for manufacturers of brake friction material as part of an original equipment service (OES) contract and the other for aftermarket brake friction material.

Brake friction material manufactured as part of an OES contract is described as “designed and manufactured for use on a series of vehicle models and model years”.<sup>2</sup> The brake friction material manufacturer is “often required to supply replacement parts to motor vehicle manufacturers for 10 years”<sup>1</sup> under an OES contract. Brake friction material used on an aftermarket replacement part that is not part of an OES contract are “designed and manufactured for use on a series of vehicle models and model years.”<sup>1</sup> The OES contract and aftermarket replacement brake is based on the model year of the vehicle and not on the year the vehicle is manufactured. However, the exemptions listed in HSC sections 25250.55(g) and (h) are based on the year the **vehicle is manufactured**. The law clearly states that HSC section 25250.55(g) exempts “**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 [bold and italics for emphasis]”. HSC 25250.55(h) exempts “**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 [bold and italics for emphasis]”. By adding language in the regulations to specify that OES contract brakes and aftermarket replacement brakes are included in the HSC 25250.55(g) and (h), the Department will expand the scope of these exemptions allowing these brakes to be installed on new vehicles and used to service new vehicles manufactured after January 1, 2021 and January 1, 2025.

Under well-established principles of the proper exercise of rulemaking authority granted to administrative agencies, the implementing regulations may neither expand nor shrink the scope of the authority conferred by the authorizing statute. The department cannot include the requested clarification for these exemptions to the regulations because it would enlarge the scope of the statute. The department does not have an authority section that allows the department to take such action. If the legislature wanted additional exemptions in the statute, they could have included them in the statute, or provided an authority section in the statute to allow a regulation to expand the exemptions section of the law. Since the legislature did neither, the department cannot add them to a regulation indirectly.

### *Due Diligence Requirements for Automobile Importers*

Comment letter 10, Comment 1

A comment was received regarding due diligence requirements for an importer of an automobile. In particular, what was expected of an automobile importer in terms of checking the marking of the friction material already on the automobile.

**Response:** No change was made to the proposed regulatory text. Health and Safety Code section 25250.50(e) includes an importer of motor vehicles or automobiles in the definition of “manufacturer.” An auto importer who is offering to sell vehicles in California is required to do the following:

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<sup>2</sup> Comment letter 8, page 3, Discussion on OES Contracts and Aftermarket.

- On and after January 1, 2014, confirm that any new motor vehicle offered for sale in the state shall be equipped with brake friction materials that contain less than 0.01% by weight of cadmium and its compounds; 0.1% by weight of chromium (VI) salts, lead and its compounds, mercury and its compounds, and asbestiform fibers [HSC 25250.60(b)].
- On and after January 1, 2021, confirm that any new motor vehicle offered for sale in the state shall be equipped with brake friction materials that contain less than 0.01% by weight of cadmium and its compounds; 0.1% by weight of chromium (VI) salts, lead and its compounds, mercury and its compounds, and asbestiform fibers; and 5.0% by weight of copper and its compounds [HSC 25250.60(d)].
- On and after January 1, 2025, confirm that any new motor vehicle offered for sale in the state shall be equipped with brake friction materials that contain less than 0.01% by weight of cadmium and its compounds; 0.1% by weight of chromium (VI) salts, lead and its compounds, mercury and its compounds, and asbestiform fibers; and 0.5% by weight of copper and its compounds the following compounds [HSC 25250.60(f)].

The California Brake Pad law does not require an importer to maintain records nor does it require an importer to submit a report to the DTSC at any time.

### **Enforcement**

Comment letter #9, Comment 153

Commenter suggested that the proposed regulation include language regarding enforcement and penalties as stated in Health and Safety Code section 25250.62.

**Response:** The Department determined that language on enforcement would not be included in these regulations since the statute clearly outlines the steps that will be taken for enforcement.

### **Exemption Markings**

Comment letter 7, Comment 2

Comment letter 8, Comment 2

Several comments were received regarding the inclusion of exemption markings as part of the environmental compliance marking. The Response to Comment document dated October 3, 2014 issued before the formal rulemaking is not a binding record, so for compliance predictability it is imperative that DTSC affirmatively state that it does not prohibit the use of these markings in its final regulations.

**Response:** The Department has determined that it is consistent with the statute to include a clarification in the proposed final regulations.

The Department added the following language to section 66387.8:

**(e) Should a brake friction material manufacturer mark brake friction material that is exempt?**

Exemption markings are not required. A brake friction manufacturer may include additional information in the optional field of the certification marking format specified under SAE J866:JUL2012.

As stated previously during the informal rulemaking process, brake friction material marked with Washington State's mandatory exemption markings ("WX" or "X") will be acceptable if the markings are "used in an *optional field* [emphasis added] of the format specified under SAE J866:2012 *or on another location* [emphasis added] on the brake pads." The statute states that the certification and mark of proof shall show a consistent date format, designation, and labeling "to facilitate acceptance in all 50 states and U.S. territories" for purposes of demonstrating compliance with all applicable.

***Harmonization the State of Washington's Better Brakes Regulations***

Comment letter 2, Comment 1

Comment letter 7, Comment 1

Commenters request the Department to harmonize the California regulations with the State of Washington Better Brakes regulations to avoid compliance issues and reduce confusion for end users.

**Response:** The Department has tried to harmonize the California regulations with the State of Washington regulations wherever the two state laws converge. The reader should not confuse harmonization with duplication. The California regulations will not be a carbon copy of the State of Washington Better Brakes regulations. For example, the self-certification process outlined in California's regulations is similar to the State of Washington Better Brakes regulations and reflects the current process in place to certify. Any differences between the self-certification steps in California and the State of Washington regulations indicate a difference in the two state statutes. One difference is the omission of the data transmittal step since the California statute does not require the testing certification agency to submit data to the Department. Since the Department does not receive data on the certified brake friction material, we feel it is important to clearly state the responsibilities of the manufacturer, laboratory, and testing certification agency in this process.

The Department has also included language that defines the "marked proof of certification" as a two-part marking system similar to the one used by the State of Washington. Section 66387.7 has been revised to include language on a certification mark for use on packaging (e.g., packaging logo).

***LeafMark™***

Comment letter 7, Comment 3

Comment letter 8, Comment 3

Commenters request DTSC to include the LeafMark™ in the proposal and codify this trademarked logo as a requirement for packaging.

**Response:** The Department cannot require the use of a trademark owned by a non-government third party as a requirement to be placed on packaging. The Department has used the LeafMark™ as an example of a certification mark in the initial statement of reasons. Per section 66387.7(a)(3), the Department will post certification marks on the DTSC web site that are part of the approved certification requirements submitted by a testing certification agency.

Comment letter 3, Comment 3

Comment letter 4, Comment 2

Comment letter 6, Comment 4

Commenters suggest that DTSC urge the Motor and Equipment Manufacturers Association (MEMA) to allow the use of the trademarked logo for educational and outreach purposes.

**Response:** Since the LeafMark™ is owned by a non-government third party, the Department cannot require the LeafMark™ owner (MEMA) to make their trademarked logos available for other purposes as part of the regulations.

#### *Posting Decisions on the DTSC Website*

Comment letter 3, Comment 4

Comment letter 4, Comment 3

Commenters request that DTSC specify in the regulations that it will post on its website various decision documents on the testing certification agency, certified analytical laboratory, alternative test method requests, notifications, and extension requests.

**Response:** The proposed regulations have several sections that require the Department to post specific decision documents concerning the testing certification agencies, approved alternative laboratory accreditations, approved alternative testing methods, recognized certification marks, and submitted extension applications. The table below lists the applicable regulation sections for each of these documents that shall be posted on the DTSC web site.

Proposed regulation section	Description of Decision Document
66387.4(c)	A list of approved testing certification agencies
66387.5(d)	A list of approved alternative laboratory accreditations
66387.6(l)	A list of approved alternative testing methods
66387.7(a)(3)	A list of recognized certification marks
66387.9(a)(4)	A list of extension applications received and their status

### Support of the Proposed Regulations

Comment letter 4, Comment 1

Comment letter 5, Comment 1

Comment letter 6, Comment 1

Commenters support the approach and the specific language that DTSC has adopted in the revised regulations.

**Response:** The Department appreciates the feedback on the regulations.

### Editorial Comments

The Department received several editorial comments. These comments were grouped into three categories: (1) comments not incorporated into the regulations, (2) comments incorporated into the regulations, and (3) one editorial comment incorporated in some sections and not in others. A general description of the comment and the response is provided below a table identifying the affected section and source of the comment.

#### *The following comments were not incorporated into the revised regulations.*

- Comment: Request to change the format used to cite California regulations. For example, change section 66387.6, subsection (l) to section 66387.6 (l). All other requested changes are similar.

Affected regulation sections:

Affected Regulation Section	Comment Letter Number	Comment Number
66387.3	9	14
66387.3(a)(4)(B)	9	28
66387.3(a)(5)(C)	9	34
66387.4(a)(1)	9	42 & 43
66387.4(a)(2)	9	45, 46, & 47
66387.4(a)(5)	9	51
66387.4(a)(6)	9	53
66387.4(c)	9	69, 70, 71, & 73
66387.5(a)	9	84
66387.5(b)	9	89, 91, 92, 93, & 94
66387.5(c)	9	96
66387.5(d)	9	98 & 99
66387.6(a)(2)	9	101
66387.6(g)(1)	9	107
66387.6(j)	9	114
66387.6(j)(1)(B)	9	115

Affected Regulation Section	Comment Letter Number	Comment Number
66387.6(j)(1)(C)	9	116
66387.6(j)(2)	9	117
66387.6(k)(1)(D)	9	120
66387.7(d)	9	146
66387.9(b)	9	151
66387.9(c)	9	152

**Response:** DTSC follows the California Supreme Court's California Style Manual when writing citations. The [California Style Manual, 4th edition \(published by West Group\)](#), is the handbook adopted by the California Supreme Court to establish rules of style for California courts and attorneys. This manual is referenced by DTSC when drafting the text of regulations and all rulemaking documents.

- Comment: Request to change “certification” to “registration”

Affected regulation sections:

Affected Regulation Section	Comment Letter Number	Comment Number
66387.4(b)	9	56
66387.4(b)(2)	9	58
66387.4(b)(2)(B)	9	59
66387.4(b)(2)(C)	9	60
66387.7(d)	9	145

**Response:** The statute uses the word “certify” to describe the tasks and responsibilities performed by the “testing certification agency. The Department decided to use the term “certification” instead of “registration” to maintain consistency between the statute and the proposed regulations.

- Comment: Request to include the language “or the latest edition or revision” to SAE Standard references.

Affected regulation sections:

Affected Regulation Section	Comment Letter Number	Comment Number
66387.2(7)	8	6
66387.2(8)	8	6

**Response:** California Administrative Code, title 1, section 20 specifies the format requirements to be used for “incorporation by reference”. Since California

Administrative Code, title 1, section 20 requires the document to be identified by title and date of publication or issuance, the citation for SAE J866:JUL2012 and SAE J2975:DEC2013 will not be changed since it would be unclear which version of J866 and J2975 a person is required to comply. Due to this requirement, the Department will need to monitor the accreditation documents for updates and revise the regulations with the appropriate publication date in the future. The Department is required to follow the formal rulemaking process to update the “incorporation by reference”.

*The following editorial comments were incorporated into the revised regulations:*

- Comment: Request to change “SAE J 2975:DECEMBER2013” to “SAE J 2975:DEC2013” to match the citation on the actual SAE standard.

Affected regulation sections:

Affected Regulation Section	Comment Letter Number	Comment Number
66387.1(c)	9	1
66387.2(a)(8)	9	11
66387.5(a)	9	79 & 82
66387.6(a)(2)	9	100
66387.6(e)(1)(A)	--	--
66387.6(g)(2)	9	106
66387.6(j)(3)	9	118
66387.6(k)(1)(B)	9	119
66387.6(k)(4)	9	122
66387.6(k)(5)	9	124
66387.6(l)	9	126 & 127

**Response:** The change was incorporated into the revised regulation.

*The following editorial comments were incorporated in three sections of the revised regulations and not incorporated in the remaining sections.*

- Comment: Request to change “certify” and “certification” to “self-certify” and “self-certification.”

Affected regulation sections:

Affected Regulation Section	Comment Letter Number	Comment Number	Amended or Not Changed
66387.1(e)	9	3	Amended
66387.3(a)	9	21	Not changed
66387.3(a)(2)	9	24	Not changed
66387.3(a)(4)(B)1.	9	29	Not changed
66387.4(a)(3)	9	48	Amended

Affected Regulation Section	Comment Letter Number	Comment Number	Amended or Not Changed
66387.4(b)(2)(C)8.	9	68	Amended
66387.5(a)	9	78	Not changed
66387.5(b)	9	90	Not changed
66387.6(d)	9	102 & 103	Not changed
66387.6(i)	9	112 & 113	Amended
66387.7	9	127	Not changed
66387.7(a)	9	128 thru 134	Not changed
66387.7(a)(3)	9	138	Not changed
66387.7(b)	9	139	Not changed
66387.7(c)(3)	9	142	Not changed
66387.7(d)	9	143	Not changed

**Response:** The Department evaluated each instance where the term “self-“ was suggested. The term was incorporated in the following sections:

- Section 66387.1(e) was changed to incorporate the word “self-“ before the word “certify.”
- Section 66387.4(a)(3) and section 66387.4(b)(2)(C)8 was changed since it was used to describe the documents listed in the section 66387.3.
- Section 66387.6(i) was amended since it is used to refer to the process used in section 66387.3.

The term was not incorporated in the following sections for the reason provided:

- Section 66387.3 describes the self-certification process. Using the term “self-“ before “certify” is redundant.
- Section 66387.5 refers to in section 66387.3 which describes the self-certification process. Using the term “self-“ before “certify” in the instances suggested is redundant.
- Section 66387.6(d) refers to section 66387.3 which describes the self-certification process. Using the term “self-“ before “certify” in the instances suggested is redundant.
- Section 66387.7 describes the “mark proof of certification.” “Mark proof of certification” is used in the law so it was not be modified. Section 66387.7 also discusses “certification mark.” Since the definition of “certification mark” includes “self-certify,” using the term “self-“ before “certification mark” is redundant. This reasoning is also used for rejecting to modify “certify” in this section.

## Comments by Regulation Section

For specific regulation sections, the comments and their corresponding responses are provided in this section.

### 66387.1 Definitions

#### Section 66387.1(c)

Comment Letter 9, Comment 2

Commenter requests adding the following to the end of the definition:

“or a test results reporting method different from the methodology specified in California Code of Regulations, title 22, section.”

**Response:** This change was not incorporated. A definition is not an appropriate location to discuss reporting requirements and is better addressed in section 66387.6(g).

#### Section: 66387.1(f)

Comment letter 9, Comment 4

Commenter suggests adding an (f) to the definition

**Response:** The (f) is already included in the copy of the regulation posted on the website. No change is needed.

#### Section 66387.1 new subsection (g)

Comment letter 9, Comment 5

Commenter requests a new definition for environmental compliance level.

**Response:** The following language was added based on the comment:

(g) “Environmental compliance level” means the single letter identified in California Code of Regulations, title 22, section 66387.8, subsections (b), (c), or (d) that specifies the constituent concentration levels for which a brake friction formulation does not exceed concentration levels in subsections (b), (c), or (d).

#### Section 66387.1(g), now subsection 66387.1(h)

Comment letter 9, Comment 6

Commenter requests the following sentence be added to the end of the definition:

“It is the environmental compliance level followed by the two-digit year of manufacture.”

**Response:** This change was incorporated into the revised regulations.

#### Section 66387.1(h)(2), now subsection 66387.1(i)(2)

Comment letter 9, Comment 7

Commenter questions whether the last sentence in the definition of “manufacturer” is always true.

**Response:** The sentence “In each instance, the term “manufacturer” is used, this chapter identifies which type of manufacturer is referred to.” was deleted. By deleting this sentence, the definition is consistent with the law and not duplicative of the phrase “except where otherwise specified” stated earlier in the definition.

Section: 66387.1(i), now subsection 66387.1(j)

Comment letter 9, Comment 8

Commenter suggests the following editorial and formatting changes to the definition of “marked proof of certification.”

~~(h)~~(i) “Marked proof of certification” means:

“(1) ~~1~~†The unique identification code and environmental compliance marking marked on the brake friction material; and

~~(a)~~(2) ~~2~~†A self-certification mark that appears on the brake friction material packaging that provides attestation that the brake friction material has been correctly tested and self-certified as compliant with the requirements in Health and Safety Code section 25250.51, 25250.52, and 25250.53.

**Response:** The Department incorporated the following text and formatting changes in the revised regulations. Text changes are shown in *red, italic font.*:

(e) “Marked proof of certification” means:

(1) ~~the~~ *The* unique identification code and environmental compliance marking marked on the brake friction material; and

(2) ~~a~~ *A* certification mark that appears on the brake friction material packaging that provides attestation that the brake friction material has been tested and certified as compliant with the requirements in Health and Safety Code section 25250.51, *25250.51 and* 25250.52, ~~and-or~~ *25250.51 and* 25250.53.

Section 66387.1(k), now subsection 66387.1(l)

Comment letter 9, Comment 9

Commenter suggests editorial and formatting changes to the definition of “regulated constituents.”

**Response:** Incorporated the suggestion to tabulate the definition and to capitalize each line. Sections 66387.6 (d)(2)(A) through(D) were also formatted this way for consistency.

Section 66387.1(n), now subsection 66387.1(o)

Comment letter 9, Comment 10

Commenter suggests editorial changes to the definition of “testing certification agency.”

**Response:** This change was not incorporated since the statute definition was used and could not be altered.

### **66387.3 Self-certification of compliance**

#### Section 66387.3

Comment letter 9, Comment 12

Commenter suggests replacing the word “the” to “a” before the phrase “testing certification agency” in the first sentence.

**Response:**The change was incorporated in the revised regulations.

#### Section 66387.3

Comment letter 9, Comment 13

Commenter suggests the changing the citation “J2975:2015” to “SAE J 2975: DEC2013”.

**Response:** The change was incorporated in the revised regulations.

#### Section 66387.3

Comment letter 9, Comments 15, 16, 17, 18, 19, and 20

Commenter suggests amended text as follows:

“The testing certification agency assigns the environmental compliance ~~markinglevel~~ and publicly posts the following on its website: ~~the marked proof of certification~~ registered unique identification code(s), the assigned environmental compliance level for each registered unique identification code, and self-certification documentation ~~on their website.~~”

**Response:** These changes were incorporated into the revised regulations.

#### Section 66387.3(a)(2)

Comment letter 9, Comments 22 and 23

Commenter suggests adding the word “required” before the phrase “laboratory testing results” in the first sentence and replacing the word “needed” with “required” in the second sentence.

**Response:** The changes were incorporated in the revised regulation.

#### Section 66387.3(a)(3)

Comment letter 9, Comment 25

Commenter suggests adding the phrase “by the manufacturer of the brake friction material” after the word “assigned”.

**Response:** The change was incorporated in the revised regulation language.

Section 66387.3(a)(4)(B)

Comment letter 9, Comment 26 and 27

Commenter suggests adding the phrase “and whose results were submitted to the testing certification agency” after the word “laboratory” and a comma after the phrase “The statement shall include”.

**Response:** The Department incorporated the text below in the revised regulation language. The changes are shown in *red, italic* font.

A signed and dated statement by an authorized representative of the brake friction material manufacturer declaring all brake friction materials bearing the listed unique identification codes are of the same composition as those submitted to the laboratory, *are of the same composition as those test results submitted to the testing certification agency*, and meet all of the requirements of Health and Safety Code section 25250.60 subdivision (c), subdivision (e), and subdivision (g).

The statement shall include, but is not limited, to language identical or similar to that specified in California Code of Regulations, title 22, section 66387.3, subsection (a)(4)(B)1.

**Response:** These changes were incorporated into the revised regulations and additional text was added for clarification.

Section 66387.3(a)(5)(A)

Comment letter 9, Comment 30

Commenter suggests adding the phrase “at least once” before the word “notify.”

**Response:** This change was not incorporated into the revised regulations. The testing certification agency must contact the Department once in order to meet the requirements of the section. Therefore, adding the phrase “at least once” is redundant.

Comment letter 9, Comment 31

Commenter suggests adding the phrase “of URL where the information was publicly posted on the Internet” after the word “electronically”.

**Response:** This change was incorporated into the revised regulations.

Section 66387.3(a)(5)(A)(1)

Comment letter 9, Comment 32

Commenter asks if the section requires the testing certification agency to notify the Department each time a new edge code is posted on their web site via [brakepad@dtsc.ca.gov](mailto:brakepad@dtsc.ca.gov) or if this notification applies only when the location of the public listing page changes .

**Response:** The Department wants to be notified by the testing certification agency on the location of the public listing page and when the URL for the public listing page changes via the [brakepad@dtsc.ca.gov](mailto:brakepad@dtsc.ca.gov) email address. It was not intended to require the testing certification agency to notify the Department of each new edge code posted. Upon review of the regulation language, the Department found the language in subsection (a)(5)(B) did not reflect the information requested in subsection (a)(5)(A). The change shown below for subsection (a)(5)(B) will be incorporated in the final regulations:

- (B) The notification *publicly accessible and searchable database or list* ~~to the Department~~ must include the manufacturer's name, the unique identification code, and the full URL address to the certification document.

#### Section 66387.3(a)(5)(B)

Comment letter 9, Comment 33

Commenter suggests adding the phrase "to the manufacturer" after the word "notification".

**Response:** The Department revised the text as follows:

The notification to the manufacturer ~~Department~~ must include the manufacturer's name, the unique identification code, and the full URL address to the certification document.

#### Section 66387.3(b)

Comment letter 9, Comment 35

Commenter suggests adding a (b) before the phrase "Manufacturers of brake friction material may use one set of testing results and self-certification...".

**Response:** The (b) was included in the copy of the regulation language posted on the website. No change was needed.

#### Section 66387.3(b)

Comment letter 9, Comment 36

Comment letter 8, Comment 5

One commenter asks if the term "single unique identification code" refers to the unique identification code for the brake friction material formulation while the other commenter requests clarification of the phrase "one set of test results" used in the regulations.

**Response:** The "single unique identification code" refers to the unique identification code for the brake friction material formulation. When certifying a brake friction material, the "single unique identification code" may be used if the brake friction material is used in several different brake pads. The manufacturer is not required to report the part number to the testing certification agency.

However, the “single unique identification code” cannot be used for an extension application submitted to the Department . Per Health and Safety Code section 25250.54(a)(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***” (bold and italics added for emphasis). Since “brake pad and/or brake drum” are linked to a specific vehicle model, class, platform, or other vehicle-based category, the term “brake pad and/or brake drum” is used in sections 66387.9(a)(1)(B)2(a),(b), and (c). A brake friction material may be used across several different vehicle models, classes, and platforms and requiring the unique identification code would not meet the conditions stipulated in the California statute.

In the regulations, “one set of test results” refers to the test results derived from a single sample of brake friction material that represents one brake friction material formulation. To obtain a representative sample for the brake friction material formulation, at least three samples should be tested per brake friction material formulation.

#### Section 66387.3(c)

Comment letter 9, Comment 37

Commenter suggests adding the following text:

“Manufacturers of brake friction material may also elect to use one complete set of testing results to register multiple unique identification codes for products using an identical brake friction material formulation.”

**Response:** This following language was incorporated into the revised regulations:

“Manufacturers of brake friction material may use one complete set of testing results to register multiple unique identification codes for products using an identical brake friction material formulation.”

#### Section 66387.3(c), now subsection 66387.3(d)

### **66387.4 Testing Certification agency for Brake Friction Material**

#### Section 66387.4

Comment letter 2, Comment 2

Commenter asks why the manufacturer is allowed to self-certify while the testing certification agency is required to have ISO 17065 certification.

**Response:** In order to build confidence in the mark proof of certification, the ISO Guide 65 and ISO Standard 17065 was included. These standards are internationally accepted by numerous accreditation bodies such as the American National Standards Institute and the International Accreditation Service to demonstrate to the marketplace and regulators that the certification practices used are evaluated and monitored. The statute requires the manufacturer to certify their brake friction formulation with a testing certification agency. It is important that

the testing certification agency can demonstrate their ability to review, evaluate, and assign the appropriate environmental compliance level.

Section 66387.4

Comment letter 2, Comment 3

Commenter asks if the testing certification agency can only use an ISO 17065 process.

**Response:** Correct.

Section 66387.4

Comment letter 2, Comment 4

Commenter asks why the testing certification agency is being held to a different standard and requests that California permit an alternative accreditation standard for testing certification agencies similar to what is available for analytical laboratories.

**Response:** The process and requirements proposed in this regulation reflect the current process that is used by the State of Washington and by the industry to register brake friction material formulations. The Department reviewed standards regarding product certification and verification and also consulted ANSI, one of the accreditation bodies for the United States. Based on our research, the Department did not identify an alternative standard besides ISO Guide 65 and ISO 17065.

Section 66387.4

Comment letter 2, Comment 5

Commenter states if California does require the ISO certification then the cost analysis based on the State of Washington's cost/benefit analysis is inaccurate and additional cost for the ISO certification needs to be considered.

**Response:** The cost analysis was based on the current process and requirements that are used by the brake friction material industry to register their brake friction material formulations to comply with the California statute and the State of Washington regulations. Any organizations wishing to be a testing certification agency, including the current testing certification agency, need to demonstrate they meet either the ISO Guide 65 or ISO 17065 standard. Organizations that meet either of these ISO standards demonstrate they have the ability to review, evaluate, and assign the appropriate environmental compliance level.

Section 66387.4

Comment letter 9, Comment 38 & 39

Commenter suggests adding "(ies)" after the word "agency."

**Response:** This change was not incorporated into the revised regulations.

Section 66387.4

Comment letter 9, Comment 40

Commenter suggests changing the phrase "manufacturer name" to "name of the entity that registered the unique identification code."

**Response:** The Department decided not to incorporate this comment for the following reasons: (1) a definition for the word "entity" would need to be created and may not be consistent with other uses of the word in the regulations, (2) our understanding is the formulations belong to the manufacturers not the registering entity, and (3) the manufacturers are responsible for "declaring" the brake friction material being compliant with the law per Health and Safety Code section 25260.60.

Section 66387.4

Comment letter 9, Comment 41

Commenter suggests removing quotes around the phrase "testing certification agency."

**Response:** This change was incorporated into the revised regulations.

Section 66387.4(a)(1)

Comment letter 9, Comment 44

Commenter suggests replacing the phrase "prior to testing" with "prior to using test results from that analytical laboratory".

**Response:** This change was incorporated into the revised regulations.

Section 66387.4(a)(3)

Comment letter 9, Comment 49

Commenter suggests adding the phrase "and unique identification code(s)" after the word "formulation."

**Response:** This change was incorporated into the revised regulations.

Section 66387.4(a)(5)

Comment letter 9, Comment 50

Commenter suggests replacing the word "marking" with the word "level."

**Response:** This change was incorporated into the revised regulations.

Section 66387.4(a)(6)

Comment letter 9, Comment 52

Commenter suggests replacing the phrase "marked proof of certification" with the phrase "environmental compliance level."

**Response:** This change was incorporated into the revised regulations.

Section 66387.4(b)

Comment letter 9, Comment 54 and 55

Commenter suggests the following change in italic, red font:

What is the process for obtaining the Department's approval *enfor a testing certification agency's requirements?*

**Response:** This change was incorporated into the revised regulations.

Section 66387.4(b)

Comment letter 9, Comment 57

Commenter suggests adding the following text after the first sentence:

The organization's registration requirements must always and continually meet all of the specifications and requirements in the California Code of Regulations, title 22, section 66387.4(b) even after the organization has been approved to be a testing certification agency. Even after being approved to be a testing certification agency, the organization may not modify its requirements to be less stringent than the California Code of Regulations, title 22, section 66387.4(b) without prior approval from the Department.

**Response:** This comment was not incorporated into the revised regulations since the suggested language would be considered indefinite and vests absolute discretion with the Department without any procedural requirements.

Section 66387.4(b)(2)

Comment letter 8, Comment 4

Comment letter 3, Comment 1

Comment letter 6, Comment 2

Commenters support the inclusion of national and international standards for the testing certification agency and analytical laboratories.

**Response:** The Department appreciates the feedback and support regarding the inclusion of these standards.

Section 66387.4(b)(2)(C)3

Comment letter 9, Comment 61

Commenter suggests adding the following text:

3. A specification that the earliest date (Registration Start Date) that a formulation's unique identification code(s) may be registered using a set of test results is the date on which that specific testing was completed;

**Response:** This change was not incorporated into the revised regulations. The suggested language was unclear and confusing.

Section 66387.4(b)(2)(C)4

Comment letter 9, Comment 62

Commenter suggests adding the following text:

4. A specification that the latest date (Registration End Date) that a formulation's unique identification code(s) may be registered using a set of test results is three (3) years after the date on which that specific testing was completed.

**Response:** This change was not incorporated into the revised regulations. The suggested language was unclear and confusing.

Section 66387.4(b)(2)(C)3

Comment letter 9, Comment 63

Commenter suggests removing the following text:

Recertification cycle for each certified brake friction material is performed at least every 3 years under this program. When recertifying brake friction materials, manufacturers of brake friction materials must submit updated self-certification documentation and new laboratory testing results. However, brake friction materials containing more than five percent copper, but that meet the requirements for the constituents listed in California Health and Safety Code section 25250.51, subdivisions (a)(1) through (a)(5), do not need to be submitted for new testing to be recertified prior to 2021;

**Response:** This change was not incorporated into the revised regulations.

Section 66387.4(b)(2)(C)4

Comment letter 9, Comment 64, 65, and 66

Commenter suggests the following changes and text:

- a. The proposed brake friction material registration process must allow brake friction materials containing more than five percent copper by weight, but that meet the requirements for the constituents listed in California Health and Safety Code section 25250.51, subdivisions (a)(1) through (a)(5), to have a Registration End Date of December 31, 2020 even if such a Registration End Date causes the difference between the Registration Start Date and Registration End Date to exceed three (3) years.

**Response:** The suggested text above was not incorporated into the revised regulations. The suggested text is dependent on prior comments listed above which were rejected. The Department felt the original language for section 66387.4(b)(2)(C)3 clearly stated the requirements of recertification .

Section 66387.4(b)(2)(C)5

Comment letter 9, Comment 67

Commenter suggests adding the following text:

5. A requirement that if manufacturers of brake friction materials re-register a formulation's unique identification code(s) that were previously registered through a testing certification agency, the manufacturer of brake friction materials must submit updated self-certification documentation and new laboratory testing results.

**Response:** This change was not incorporated into the revised regulations. The Department felt the language originally proposed for section 66387.4(b)(2)(C)3 clearly stated the requirements for recertification.

#### Section 66387.4(c)

Comment letter 9, Comment 72

Commenter suggests the citation 66387.4, subsection (b)(2)(E) is an error and should be changed to 66387.4, subsection (b)(2)(D).

**Response:** This change was incorporated into the revised regulations.

#### Section 66387.4(c)

Comment letter 9, Comment 74, 75, and 76

Commenter suggests adding the following text:

The testing certification agency does not need to resubmit changes to the documentation and procedures described in the California Code of Regulations, title 22, sections 66387.4(b)(2)(B) and 66387.4(b)(2)(C) so long as those changed documents continue to comply with all requirements of the California Code of Regulations, title 22, section 66387.4.

**Response:** The following language was added to the revised regulations:

The testing certification agency does not need to resubmit changes to the documentation and procedures described in the California Code of Regulations, title 22, section 66387.4, subsections (b)(2)(B) and (b)(2)(C) provided those changed documents continue to comply with all requirements of the California Code of Regulations, title 22, section 66387.4.

### ***66387.5 Accredited Laboratories for Brake Friction Materials***

#### Section 66387.5

Comment letter 9, Comment 77

Commenter suggests adding the word "testing" before the word "brake" in the header.

**Response:** This change was incorporated into the revised regulations.

#### Section 66387.5(a)(1)

Comment letter 9, Comment 80, 81, 82, 83, and 85

Commenter suggests the following format and text changes:

- (1) ISO/IEC 17025:2005 from a laboratory accreditation body that is a signatory to the International Laboratory Accreditation Cooperation Multilateral Recognition Arrangement, as of the effective date of this chapter. The laboratory's scope of accreditation to ISO/IEC 17025:2005 shall encompass *one of the following*:
- (A) *Both of the following*:
1. *SAE J2975:DEC2013; and*
  2. ~~testing to~~ *All of the necessary* test method(s) listed in SAE J 2975:DECEMBER2013.
- (B) ~~an~~ *An* alternate testing method approved under California Code of Regulations, title 22, *section 66387.6(l)* ~~66387.6, subsection (l)~~; or

**Response:** The text was changed as follows:

- (1) ISO/IEC 17025:2005 from a laboratory accreditation body that is a signatory to the International Laboratory Accreditation Cooperation Multilateral Recognition Arrangement, as of the effective date of this chapter. The laboratory's scope of accreditation to ISO/IEC 17025:2005 shall encompass one of the following:
- (A) Test method(s) listed in SAE J 2975:DEC2013, or
- (B) An alternate testing method approved under California Code of Regulations, title 22, section 66387.6, subsection (l); or

#### Section 66387.5(b)

Comment letter 9, Comment 86, 87, and 88

Commenter suggests adding language that pertains to the subcontracting of an analytical laboratory.

**Response:** These changes were not incorporated into the revised regulations. The proposed regulations clearly state that testing results submitted to the testing certification agency must be performed by an analytical laboratory accredited by one of the accreditation standards listed in section 66387.5(a). This requirement extends to subcontracted analytical laboratories and therefore the suggested language was considered duplicative.

#### Section 66387.5(b)

Comment letter 9, Comment 95

Commenter suggests adding the following text:

The alternative laboratory accreditation may be used to modify the requirements of the California Code of Regulations, title 22, section 66387.5(b).

**Response:** This change was not incorporated into the revised regulations since the suggested text in the comment above was not incorporated into the revised regulations.

#### Section 66387.5(c)(2)

Comment letter 9, Comment 97

Commenter suggests adding the word "the" before the phrase "alternative laboratory accreditation standard."

**Response:** This change was incorporated into the revised regulations.

**66387.6 Testing Methodology and Maximum Concentration of Regulated Constituents and Copper for Brake Friction Materials**

Section 66387.6(d)(2)

Comment letter 9, Comment 104

Commenter suggests the following format changes:

(2) 0.1 percent by weight for *each of these individual constituents:*

- (A) ~~asbestiform~~ *Asbestiform* fibers; and,
- (B) ~~chromium~~ *Chromium* (VI)-salts; and,
- (C) ~~lead~~ *Lead* and its compounds; and
- (D) ~~mercury~~ *Mercury* and its compounds

**Response:** The text was formatted to match section 66387.1(l). The reformatted text will appear as follows:

(2) 0.1 percent by weight for each of these individual constituents:

- (A) Asbestiform fibers.
- (B) Chromium (VI)-salts.
- (C) Lead and its compounds.
- (D) Mercury and its compounds.

Section 66387.6(g)

Comment letter 9, Comment 105

Commenter suggests the following text:

(1) The only test results which do not have to be reported to the testing certification agency are those test results determined to be laboratory error as specified in section 66387.6(h). All other test results derived from a single set of friction material samples must be reported to the testing certification agency on a single report. All such results must be reported to the testing certification agency at the same time.

- (A) Any reporting methodology which does not meet the specifications of section 66387.6(g)(1) would be considered an alternate testing method and require approval under section 66387.6(l) prior to using it for self-certification.

**Response:** The following language was incorporated into the revised regulations:

Test results determined to be laboratory error as specified in section 66387.6 subsection (h) do not have to be reported to the testing certification agency. All test results derived from a single set of friction material samples must be reported to the testing certification agency at the same time on a single report.

- (A) Any reporting which does not meet the specifications of section 66387.6, subsection (g)(1) would be considered a modification to the

testing method in subsection (a)(2) of this section and require approval under section 66387.6, subsection (k) prior to using it for self-certification.

Section 66387.6(g)(1), now subsection (g)(2)

Section 66387.6(g)(2), now subsection (g)(3)

Comment letter 9, Comment 108

Commenter suggests adding the word "either" before the word "perform."

**Response:** This change was not incorporated into the revised regulations. The Department felt the analytical laboratory needed to perform the tasks discussed in this sentence when reporting the cumulative average of the testing results.

Section 66387.6(g)(2), now subsection (g)(3)

Comment letter 9, Comment 109

Commenter suggests adding the phrase "or specify the environmental compliance level indicated by the report" to the end of the first sentence.

**Response:** The text in italic, red font was incorporated in the revised regulations:

- (3) In addition to reporting the cumulative average for each regulated constituent and copper listed in this subsection, the testing laboratory shall perform a comparison between the cumulative average and the concentrations listed under this subsection *and specify the environmental compliance level indicated by the report.*

Section 66387.6(h)

Comment letter 9, Comment 110

Commenter suggests replacing the phrase "do not need to" with the phrase "shall not."

**Response:** This change was not incorporated into the revised regulations.

Section 66387.6(h)

Comment letter 9, Comment 111

Commenter suggests adding the following text:

- (1) Laboratory error may include incorrect samples being initially submitted to the laboratory for testing.
- (2) If the laboratory previously submitted results to a testing certification agency and the laboratory later determines any of those results were laboratory error than the laboratory shall be required to inform the testing certification agency within 4 calendar days of the determination that the test results were laboratory error. The testing certification agency may then be required to withdraw registration of specific unique identification codes until such time as new testing without laboratory error is

properly provided to the testing certification agency which warrants the unique identification codes being properly registered.

**Response:** The following language was incorporated into the revised regulations:

- (1) Laboratory error may include incorrect samples being initially submitted to the laboratory for testing.
- (2) If the laboratory previously submitted results to a testing certification agency and later determines any of those results were laboratory error, then the laboratory shall inform the testing certification agency within four (4) calendar days of the determination that the test results were laboratory error. The testing certification agency shall withdraw registration of specific unique identification codes until such time as new testing without laboratory error is properly provided to the testing certification agency which warrants the unique identification codes being properly registered.

#### Section 66387.6(k)(4)

Comment letter 9, Comment 121

Commenter suggests adding a colon at the end of the sentence.

**Response:** This change will be incorporated into the final regulations.

#### Section 66387.6(k)(5)

Comment letter 9, Comment 123

Commenter suggests adding the phrase "to determine" after the phrase "Laboratory Director."

**Response:** This change will be incorporated into the final regulations.

#### Section 66387.6(l)

Comment letter 9, Comment 125

Commenter suggests adding the phrase ", testing certification agency, or testing laboratory" after the phrase "manufacturer of brake friction material."

**Response:** This change was not incorporated into the revised regulations. It will be incorporated in the final regulations.

### **66387.7 *Marked Proof of Certification***

#### Section 66387.7

Comment letter 3, Comment 2

Comment letter 6, Comment 3

Commenters support the inclusion of the certification mark (package marking) in the regulations.

**Response:** The Department appreciates the support on including the certification mark in the regulations.

Section 66387.7(a)(2)

Comment letter 9, Comment 135

Commenter suggests the following changes:

- (3) ~~The brake friction material has been registered with testing certification agency~~ *On the date the brake friction material was manufactured the unique identification code was registered with an approved testing certification agency; and*

**Response:** This change was not incorporated into the revised regulations because the suggested language is unclear and confusing.

Section 66387.7(a)(3)

Comment letter 9, Comment 136 and 137

Commenter suggests the following changes:

- (4) Self-certification documentation has been submitted to ~~the~~ *an approved* testing certification agency and is available on ~~their~~ *the testing certification agency's* website.

**Response:** This change was incorporated into the revised regulations.

Section 66387.7(c)(1)

Comment letter 9, Comment 140

Commenter suggests replacing the phrase "have regulations" with "may regulations" and asks if other states have regulations requiring the hot and cold co-efficient of friction be marked on the brake friction material.

**Response:** The Department is aware of 14 states that require the hot & cold coefficient be marked on brakes sold in their state. California is not one of the 14 states that require this mark. This change was not incorporated into the revised regulations.

Section 66387.7(c)(2)

Comment letter 9, Comment 141

Commenter suggests replacing the phrase "the testing certification agency" with the phrase "an approved testing certification agency."

**Response:** This change was incorporated into the revised regulations.

Section 66387.7(d)

Comment letter 9, Comment 144

Commenter suggests replacing the phrase "the testing certification agency" with the phrase "an approved testing certification agency" in the first sentence.

**Response:** This change was incorporated into the revised regulations.

#### Section 66387.6(e) and (g)

Comment letter 7, Comment 4

Commenter asks the Department to address issues regarding the whether and how testing performed prior to the effective date of these regulations can be used to satisfy the certification requirements in the regulations. As part of their testing concerns, the commenter questions the requirement for triplicate testing due to the "margin of error" in the test method and maintaining records for 10 years.

**Response:** The Department based the testing requirements in the California regulations on the testing requirements listed in the State of Washington Better Brake Rule. Currently, the State of Washington accepts test results for SAE J 2975:2011 and SAE J 2975:DEC2013. The Department will not require manufacturers to retest brake friction material formulations registered with the testing certification agency prior to the effective date of these regulations. On and after the effective date of these regulations, manufacturers shall test their brake friction material formulations using the test method specified on the regulations.

The triplicate sampling language in section 66387.6(e) is similar to the requirement listed in the State of Washington Better Brakes regulations, section WAC 173-901-080(4). The process outlined in section 66387.7(e) is standard protocol when reporting laboratory results.

The requirement to maintain records for 10 years is also similar to the requirement in the State of Washington Better Brakes regulations, section WAC 173-901-080(7).

#### **66387.8 Environmental Compliance Marking**

##### Section 66387.8(a)

Comment letter 9, Comment 147

Commenter requests change the text as follows:

*The environmental compliance marking is defined in the California Code of Regulations, title 22, section 66387.1(h). It*~~The environmental compliance marking is the last letter marked on brake friction materials followed by the two digit year of manufacture. It must be an "A," "B," or "N" and it~~ allows a person to determine the level of environmental compliance of the brake friction material.

**Response:** The following text was incorporated into the revised regulations:

The environmental compliance level is defined in California Code of Regulations, title 22, section 66387.1, subsection (g). It must be an "A," "B," or "N" and it allows a person to determine the level of environmental compliance of the brake friction material.

##### Sections 66387.8(b), 66387.8(c), and 66387.8(d)

Comment letter 9, Comment 148, 149, and 150  
Commenter suggests replacing the word “marking” with “level.”

**Response:** This change was incorporated into the revised regulations.

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**SUMMARY AND RESPONSE TO COMMENTS RECEIVED DURING THE 15-DAY NOTICE PERIOD  
JUNE 16, 2016 THROUGH JUNE 30, 2016.**

<b>COMMENTS NUMBER</b>	<b>COMMENTS</b>	<b>AFFILIATION</b>
1	Jill Bicknell	California Stormwater Quality Association
2	Julia Rege/Stacy Tatman	Global Auto Alliance/Alliance of Automobile Manufacturers
3	Ann Wilson	Motor & Equipment Manufacturers Association and The Brake Manufacturers Council

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June 30, 2016

Ms. Suzanne Davis  
Safer Products and Workplaces Program  
California Department of Toxic Substances Control (DTSC)

Subject: CASQA Comments on Revised Draft Brake Pad Regulations

Dear Ms. Davis:

On behalf of the California Stormwater Quality Association (CASQA<sup>1</sup>), thank you for the opportunity to comment on DTSC's revised draft of regulations to California's law regulating copper, other metals, and asbestos in vehicle brake pads. CASQA's municipal agency members and Caltrans are relying on successful implementation of the California Brake Pad Law to comply with Clean Water Act and California Porter-Cologne requirements to reduce levels of copper in urban stormwater runoff. CASQA strongly supports DTSC's plan to adopt and implement the regulations as quickly as feasible.

A number of our recommendations on the earlier drafts have been incorporated into this version and we thank you for that. We do have one area of concern with the revised draft. Proposed new language (Section 66387.4, final sentence) eliminates the requirement for Testing Certification Agencies to submit changes to their certification practices to DTSC for approval once the agencies have received DTSC's initial approval, as long as the Testing Certification Agencies continue to maintain compliant procedures. CASQA understands why DTSC would desire such a change as otherwise certifications could be delayed by relatively small or frequent events, like staff changes at the Testing Certification Agency or minor updates to various procedural documents.

The concern is that the proposed change means the Testing Certification Agency would essentially self-certify its procedural changes. This would result in a lack of transparency and accountability. As we wrote in our May 23 comment letter and reiterated in testimony at the May 27 DTSC hearing, the Testing Certification Agency plays a critical role in the program and the certification process must be of the highest integrity. The way to ensure that is through transparency and accountability.

To maintain that level of integrity and to address concerns regarding delays or drain on resources, CASQA recommends as an alternative to the proposed new language that DTSC simply require only submittal (not approval) of all changes. That way DTSC could, at its discretion, review changes and notify the Testing Certification Agency of any non-compliant changes.

<sup>1</sup> CASQA is comprised of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout California. Our membership provides stormwater quality management services to more than 22 million people in California.

CASQA Comments on Revised Draft Brake Pad Regulations

Thank you again for the opportunity to provide constructive comments. Again, we urge adoption of these regulations without further delay. If you have any questions or would like to set up a meeting, please contact CASQA Executive Director Geoff Brosseau at (650) 365-8620.

Sincerely,



Jill Bicknell, Chair  
California Stormwater Quality Association

cc: Meredith Williams, DTSC Deputy Director  
CASQA Board of Directors and CASQA Executive Program Committee

June 30, 2016

2

Comment Letter 2

June 30, 2016

Ms. Suzanne Davis  
Safer Products and Workplace Program  
Office of Planning and Environmental Analysis  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, California 95812-0806

*Sent Electronically to:* [brakepads@dtsc.ca.gov](mailto:brakepads@dtsc.ca.gov)

**SUBJECT:** Comments on Chapter 35. California Brake Friction Material Requirements

Dear Ms. Davis:

We are writing on behalf of the members of the Association of Global Automakers, Inc.<sup>1</sup> (Global Automakers) and the Alliance of Automobile Manufacturers<sup>2</sup> (Auto Alliance), which include nearly every company selling new motor vehicles in the United States. We appreciate the opportunity to provide the following comments on the proposal for Brake Friction Material Requirements.

### **OVERVIEW**

On April 8, 2016, DTSC proposed to adopt California Code of Regulations, Title 22, Chapter 35. These regulations proposed performance requirements for (1) testing the chemical content of brake friction materials, (2) marking compliant brake friction materials, (3) reviewing certification procedures used by the testing certification agency, (4) approving alternative chemical analytical testing methods for brake friction materials, and (5) approving alternative laboratory accreditation standards for analytical laboratories. The proposed regulation also clarified the process to approve extension requests for the 2025 statutory requirements. On June 16, 2016, DTSC issued revised regulations and requested comment on the changes reflected in this most recent version.

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<sup>1</sup> Global Automakers' members include Aston Martin, Ferrari, Honda, Hyundai, Isuzu, Kia, Maserati, McLaren, Nissan, Subaru, Suzuki, and Toyota. Please visit [www.globalautomakers.org](http://www.globalautomakers.org) for further information.

<sup>2</sup> Auto Alliance members are BMW Group, FCA US, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche Cars North America, Toyota, Volkswagen Group of America, and Volvo Cars of North America. For additional information, please visit [www.autoalliance.org](http://www.autoalliance.org).

**CONCERNS**

We would like to thank DTSC for addressing one of the concerns that we raised with the April 8, 2016 draft regulations for the Brake Friction Material Law. We appreciate DTSC’s willingness to include language in the regulations clarifying that brake friction material marked with Washington State’s mandatory exemption markings (“WX” or “X”) will be acceptable if the markings are used in an optional field of the format specified under SAE J866:2012 or on another location on the brake pads. The inclusion of this regulatory clarification will provide a higher degree of compliance certainty for the regulated community.

We continue to have serious concerns about a number of issues, which we have raised in all of our previous comments. Our primary concern is the need for these regulations to parallel the Washington State Better Brakes regulations as closely as possible to avoid unnecessary duplication of effort that has no environmental benefit. This approach allows for clarity for the consumer, while providing a consistent approach for the automotive sector. Our concerns focus on the following:

1. Acceptability of the Automotive Aftermarket Suppliers Association’s LeafMark™ designation for package identification for compliant brake friction materials; and
2. Testing Requirements and Record Keeping Requirements

***I. Leaf Mark™ Acceptability***

In our comments submitted on May 23, 2016, we requested that DTSC include language in its rulemaking that speaks directly to the LeafMark™ designation for packaging compliant brake friction materials. We understand that in the absence of a regulation stating otherwise, the use of the LeafMark™ is acceptable. However, from a compliance standpoint, we urge DTSC to explicitly state in the regulations that it is acceptable to use the LeafMark™. Without this language, our members face compliance uncertainty if they opt to provide the Automotive Aftermarket Suppliers Association’s LeafMark™ on packaging.

As with our earlier comment on the exemption markings, which DTSC addressed, this clarification would be consistent with the statute. While the Initial Statement of Reasons (ISOR) addresses this issue in Section 66387.7(a), clear and specific language in the rulemaking is necessary to provide certainty that California finds the LeafMark™ acceptable.

Comment  
1

We also urge DTSC to provide language in the FSOR explaining that DTSC’s regulation does not require the LeafMark™. DTSC should make it clear that while use of LeafMark™ designation is not required, California encourages its use.

Comment  
2

## 2. Testing Requirements and Record Keeping Requirements

We would like to restate the request from our previous comments submitted to the DTSC on May 23, 2016 regarding testing requirements. The proposed regulations do not address the issue of whether and how testing performed prior to these new requirements can be used to satisfy the certification requirements. It is important that DTSC add affirmative language to this regulation indicating that testing and certification previously performed in accordance with Washington state requirements will be acceptable in California. It is crucial that manufacturers have the certainty that testing, certification and marking performed in good faith prior to California adopting these regulations will continue to provide a shield from non-compliance.

Comment  
3

Having to perform duplicative testing for two different states is costly and onerous and would restrict the free-flow of merchandise between states while adding no environmental benefit. If the testing method is flawed or inaccurate, DTSC should identify those problems and require a better approach. We request that DTSC address this issue in the regulations or at a minimum in the FSOR.

In addition, we have noted that in Section 66387 and throughout, the SAE testing standard referenced by this proposal (SAE J2975:DEC2013) appears to be a different version than the one referenced in the Washington State Better Brakes regulation (SAE J2975:2011). As stated above, it is our utmost concern that the California and Washington regulations align so that testing and certification can be performed that will satisfy the requirements of both states. We urge DTSC to either adopt the same version of the standard as Washington (SAE J2975:2011) or to indicate in the regulation that testing performed according to the version specified by Washington will be acceptable in California as well. While important for all brake pads, this is an urgent matter so that brake friction materials already tested to meet Washington requirements will be acceptable to California as well.

Comment  
4

Similarly, in Section 66387.3, DTSC states that testing results will be posted on the “testing certification agency” website. In Section 66387.1 (o) “Testing certification agency” is defined as a “third-party testing certification agency.” That section goes on to state that “[t]he term ‘registrar’ is used by the industry when referring to this entity.” Meanwhile, in WAC 173-901-040(5), Washington refers to an “industry-sponsored registrar.” We urge DTSC to clarify that these terms are interchangeable.

Comment  
5

### CONCLUSION

We thank you for considering our comments. We continue to raise these issues because they are critical for a clear and workable regulation. Please do not hesitate to contact us with

questions or if we may provide additional information. We look forward to working with DTSC as it moves forward.

Best Regards,



Julia M Rege  
Director, Environment & Energy  
Association of Global Automakers  
202.650.5555  
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Stacy Tatman  
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**Motor & Equipment Manufacturers Association**  
1030 15th Street, NW Suite 500 East Washington, DC 20005  
Tel 202.393.6362 Fax 202.737.3742 E-mail info@mema.org



Comment Letter 3

June 30, 2016

Ms. Suzanne Davis  
Department of Toxic Substances Control  
P.O. Box 806 Mail Station/Code: SPWP/MS 12A  
Sacramento, CA 95812-0806

*Via E-mail: brakepad@dtsc.ca.gov*

**RE: Comments to DTSC Formal Proposed Rule, Motor Vehicle Brake Friction  
Material [as revised June 16, 2016]**

Dear Ms. Davis:

The Motor & Equipment Manufacturers Association (MEMA)<sup>1</sup> and the Brake Manufacturers Council (BMC)<sup>2</sup> submit the following comments to the California Department of Toxic Substances Control's (DTSC) revisions of the formal proposed rule issued June 16, 2016.<sup>3</sup>

The brake friction materials manufacturers have been actively engaged on this issue for years. As we mention in our May 23, 2016 comments, we support much of the proposed regulation. Our remaining concerns are based on the need to ensure the California regulation is implemented in a manner that provides clarity for our members. Clarity is of the utmost importance as we continue to make significant investments to comply with not only California regulations, but also similar regulations in Washington State and the voluntary agreements reflected in the Copper-free Brake Initiative Memorandum of Understanding (MOU).<sup>4</sup>



<sup>1</sup> MEMA represents more than 1,000 companies that manufacture motor vehicle systems and parts for use in the light and heavy-duty vehicle original equipment and aftermarket industries. The motor vehicle parts manufacturing industry is the nation's largest direct employer of manufacturing jobs – over 734,000 workers are employed by suppliers in all 50 states. MEMA represents its members through four divisions: Automotive Aftermarket Suppliers Association (AASA), Heavy Duty Manufacturers Association (HDMA), Motor & Equipment Remanufacturers Association (MERA) and Original Equipment Suppliers Association (OESA).

<sup>2</sup> BMC, a product council of the AASA, represents manufacturers of brake systems, components and friction materials.

<sup>3</sup> [http://www.dtsc.ca.gov/SCP/upload/Revised\\_regulation\\_language\\_redline.pdf](http://www.dtsc.ca.gov/SCP/upload/Revised_regulation_language_redline.pdf)

<sup>4</sup> Memorandum of Understanding on Copper Mitigation in Watersheds and Waterways between U.S. EPA and Motor Equipment Manufacturers Association, Automotive Aftermarket Suppliers Association, Brake Manufacturers Council, Heavy Duty Manufacturers Association, Auto Care Association, Alliance of Automobile Association, Association of Global Automakers, Truck and Engine Manufacturers Association, and Environmental Council of the States, January 21, 2015.



## Summary of Concerns

MEMA and BMC thank DTSC for addressing two concerns we raised in our May 23, 2016 comments. We appreciate DTSC codifying exemption markings are not required on brake friction material. The inclusion of this regulatory language provides certainty for the regulated community. We also appreciate DTSC adding regulatory language under “Step 6” of “Self-certification of compliance” (Section 66387.3) that self-certification should be taking testing samples of each brake friction formulation and should not require testing each edge code. However, as we discuss in more detail below, DTSC needs to clarify what is meant by the phrase “one complete set of testing results” versus “one set of testing results.”<sup>5</sup>

While some changes DTSC made to the proposed regulation will help provide clarity, many of the issues that MEMA and BMC raised in previous comments have not been addressed and remain concerns for our members. The largest concern for industry is that the California regulation is implemented in a manner that provides clarity for brake friction materials manufacturers as we continue to make significant investments to comply. We urge DTSC to address the clarifications we have recommended below in regulatory language. If DTSC does not address these recommendations in regulatory language, then MEMA and BMC request DTSC provide clarification at least in the Final Statement of Reasons. Our comments focus on five areas:

- 1) Clarification of Section 25250.55(g) and (h)
- 2) Definition of Testing Certification Agency, Replacement Parts and Original Equipment Service Contracts
- 3) Self-certification: Clarification of Terms and Referencing the Standard’s Year
- 4) Product Marking and Packaging Labeling Consistency
- 5) Enforcement of Testing Certification Agency Requirements

## Clarification of Section 25250.55(g) and (h)

In our previous comments,<sup>6</sup> we outline our concern that the California law does not allow for an inventory sell down aligning with the State of Washington and the Copper-free Brake Initiative MOU that allows for a timeline of 10 years. DTSC asserts that Health and Safety Code (HSC) Sections 25250.55(g) and 25250.55(h), which addresses exemptions and is in effect an inventory sell down provision, are clear and do not need a regulation to interpret that section of the statute.<sup>7</sup>

Comment  
1

<sup>5</sup> Section 66387.3 the added language of Subsection (c) “Manufactures of brake friction material may use one complete set of testing results to register multiple unique identification codes for products using an identical brake friction material formulation.”

<sup>6</sup> MEMA and BMC comments submitted to DTSC on the informal proposed rule on September 5, 2014, the revised informal proposed rule on December 5, 2014 and the formal proposed rule on May 23, 2016.

<sup>7</sup> Department of Toxic Substances Control Responses to Comments on the Informal Draft Regulations, Division 4.5, California Code of Regulations, Title 22 Chapter 25. Hazardous Materials: Motor Vehicle Brake Friction Materials, October 3, 2014, p. 2.



However, in order to provide certainty for the brake friction manufacturers industry, MEMA and BMC request that DTSC provide clarifying language in the Final Statement of Reasons that Sections 25250.55(g) and (h) apply to both original equipment service (OES) contracts and aftermarket replacement parts. Doing so would provide the industry greater certainty to have clarification that these exemptions apply to both market channels of brake friction materials. Both categories of brake friction materials – aftermarket and OES contracts – are intended to be applied to a series of vehicle models and model years. (Please refer to MEMA and BMC’s May 23, 2016 comments for more detail on the two market channels for replacement brake friction materials.)

Comment  
1

### Definitions [66387.1]

#### Testing Certification Agency

The proposed regulation requires that the testing certification agency for brake friction material be accredited in accordance with requirements of either ISO/IEC 17065:2012 standard or the ISO/IEC Guide 65:1996 standard, which requires that the laboratory and the testing certification agency (or registrar) are separate entities.<sup>8</sup> MEMA and BMC support this requirement.

However, the definition of ‘testing certification agency’<sup>9</sup> provided in the California statute and in the proposed regulation could be misconstrued as meaning the testing certification agency needs to be directly involved and overseeing laboratory testing for certification. As we understand it, per the requirements of ISO/IEC, the DTSC does not intend for the testing certification agency (or registrar) to be directly involved, overseeing or enforcing laboratory testing procedures for certification. MEMA and BMC appreciate DTSC clarifying in the Initial Statement of Reasons (ISOR) that DTSC does not require the ‘testing certification agency’ to have an in-house analytical laboratory.<sup>10</sup> We request, however, that DTSC add further clarifying language in the Final Statement of Reasons that the ‘testing certification agency’ and the laboratory are required to be separate entities and not directly involved in each other’s operations as stipulated by the ISO/IEC requirements.

Comment  
2

#### Replacement Parts and Original Equipment Service Contracts

If DTSC provides clarifying language that Sections 25250.55(g) and 25250.55(h) apply to OES contracts and aftermarket replacement parts, MEMA and BMC request DTSC define these terms. Further, the proposed regulation language for the Extension Process (Section 66387.9), also uses the term ‘replacement part’ when explaining that a manufacturer, if requesting an extension, must provide information on whether the brake friction material is intended for original equipment or replacement parts. Therefore, MEMA and BMC request that DTSC define ‘replacement parts’ and ‘brake friction material manufactured as part of an OES

Comment  
3

<sup>8</sup> Section 66387.4

<sup>9</sup> Testing certification agency is defined as 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.

<sup>10</sup> Initial Statement of Reasons, Section 66387.1(n) and Section 66387.4



contract' in the final rule or in the Final Statement of Reasons. (Please see MEMA and BMC's recommended definition for 'OES contract' and 'replacement parts' in our May 23, 2016 comments).

Comment  
3

### Self-Certification of Compliance [66387.3]

#### Clarification of "Complete Set of Testing Results"

MEMA and BMC support the language added under Section 66387.3(c), "*Manufactures of brake friction material may use one complete set of testing results to register multiple unique identification codes for products using an identical brake friction material formulation.*" This language clarifies that self-certification does not require testing of each edge code, but only testing of each brake friction formulation. This language is extremely helpful.

MEMA and BMC request that DTSC defines or discusses what the phrase "one complete set of testing results" means under Section 66387.3(c) since the phrase "one set of testing results" is used in Section 66387.3(b). The phrase should be clarified in the final regulation or at least the Final Statement of Reasons. Alternatively, DTSC should use "one set of testing results" in both Subsections (b) and (c) to avoid confusion.

If DTSC keeps the "one complete set of testing results" phrase, MEMA and BMC recommend the phrase is defined as the testing results from the testing carried out under "Step 1" of the certification process in Section 66387.3, not all the results of all testing ever carried out on a brake friction material formula. In a letter from Washington State's Department of Ecology (DoE) submitted to MEMA on February 18, 2016, DoE clarified what was meant by the phrase "all testing results" in Washington Administration Code 173-901-080. Washington State's DoE clarified that the phrase "all testing results" meant all testing results from testing carried out for certification and did not mean testing results from experimental formulations, conformity of production audits, incorrectly manufactured products, or previous certification cycles. Please see attached letter from Washington State's DoE.

Comment  
4

It would benefit the brake friction materials manufacturers, the certification agency and the laboratories if the phrase "one complete set of testing results" is defined in either the final regulation or the Final Statement of Reasons. Without this clarification, there may be inconsistent interpretations of what is meant by the phrase "one complete set of testing results" in the industry.

#### Referencing the Standard's Specific Year

Under the same section, MEMA and BMC strongly urge the State not to reference an industry standard's specific year in the text of the rule without adding to the reference a caveat for the latest revision or edition. We understand that California Administrative Code, title 1, section 20 requires that the document be identified by title and date of issuance. Therefore, when DTSC sites a document and title (i.e. SAE J866:2012), we urge DTSC to add to the reference "or the latest edition or revision." Referencing a specific year without having a caveat for the latest edition, greatly limits the State's regulation only to that specific year.

Comment  
5



### Product Marking and Packaging Labeling Must Be Consistent [66387.8]

MEMA and BMC request that DTSC includes regulatory language in the final rule, or at least the Final Statement of Reasons, that it recognizes and accepts the LeafMark™ packaging logo on brake friction materials sold in California. The LeafMark™ is recognized by stakeholders of the Copper-free Brake Initiative MOU and by the State of Washington.<sup>11</sup> Because brake friction material manufacturers are changing their products and product packaging to be compliant with both the MOU, and the Washington law, it is important that California recognizes and accepts these marking and packaging labeling requirements. (Please see MEMA and BMC's May 23, 2016 comments for more detail on the BMC developed LeafMark™ logo).

MEMA and BMC understand that California's law does not explicitly require package labeling as the Washington law requires. We recognize that DTSC does not need to require the LeafMark™, and in absence of a regulation stating otherwise, the use of the LeafMark™ is acceptable. We also recognize the ISOR addresses the issue (Section 66387.7(a)) of a certification mark packaging logo and provides the example of the "A", "B" or "N" with the LeafMark™ logo. However, in order to provide certainty for all stakeholders, MEMA and BMC request that DTSC explicitly provide language in the final rule, or at least the Final Statement of Reasons that California recognizes and accepts the LeafMark™ logo.

Comment  
6

### Testing Certification Agency for Brake Friction Material [66387.4]

MEMA and BMC support DTSC's requirement that the testing certification agency be accredited in accordance with requirements of either ISO/IEC 17065:2012 standard or the ISO/IEC Guide 65:1996 standard. It is imperative that DTSC enforce the requirement that the laboratory and the testing certification agency (or the registrar) are separate entities.

Comment  
7

MEMA and BMC appreciate consideration of the recommendations presented herein. Please do not hesitate to contact Laurie Holmes at 202-312-9247 or [lholmes@mema.org](mailto:lholmes@mema.org) with questions or for additional information. We look forward to working with DTSC as this proposed rule moves forward.

Respectfully Submitted,

Ann Wilson  
Senior Vice President  
Motor & Equipment Manufacturers Association

<sup>11</sup> The Copper-free Brake Initiative MOU, Section VI, A.1.d., p. 7 and WAC 173-901-090.



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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February 18, 2016

Ms. Ann Wilson, Sr. Vice President  
Motor Equipment Manufacturers Association  
1030 15th St. NW, Suite 500 East  
Washington, DC 20005

SUBJECT: Clarification Regarding the Scope of Testing Results Reported Under the Better Brakes Rules, Chapter 173-901 WAC

Dear Ms. Wilson:

Thank you for the opportunity to provide clarification on the Better Brakes Rules. We greatly appreciate the brake manufacturing industry's efforts to reduce the copper content of brake friction materials in Washington State.

In our meeting on October 14, 2015, you asked for clarification regarding the meaning of WAC 173-901-060(1)(B), which reads:

**“Step 2:** Ensure that the laboratory provides laboratory testing results for each brake friction material directly to an industry-sponsored registrar. The brake friction material manufacturer may review the testing results prior to the laboratory sending the results to the registrar. However, the manufacturer must ensure that the laboratory submits the results from all testing conducted on a given friction material formula. All testing and reporting of results must be carried out in accordance with WAC 173-901-080.”

In particular you asked for clarification of the meaning of the term “all testing results,” and asked if this required the submittal of several different types of testing data including:

- All edge codes or all formulations
- Experimental formulations
- Conformity of production audits
- Incorrectly manufactured formulas
- Testing results that were submitted in a previous three year testing cycle

WAC 173-901-060(1)(B) should be read in the context of the certification process outlined in WAC 173-901-060 and the rest of the Better Brakes Rules. Step 1 of the certification process requires manufacturers to submit a sample of a brake friction formula to a laboratory for testing,

in accordance with WAC 173-901-080. WAC 173-901-080 requires that each brake friction material be tested in triplicate, and under certain circumstances requires additional testing to demonstrate compliance. Step 2 only requires the submittal of all testing results from the testing carried out under Step 1, not all the results of all testing ever carried out on a brake friction material formula.

Please see more detailed responses for each category of data:

**Question 1: Do manufacturers need to report cumulative averages including all data from a formulation or from an edge code?**

Manufacturers are only required to test at the formulation level and may use one set of testing results for any edge codes that are manufactured using this formulation.

For example, Manufacturer X makes formula ABC, which is used in product D, E, and F. Manufacturer X is only required to send a single sample of formula ABC to the laboratory and use the results for the certifications of D, E, and F.

Ecology was previously asked if a manufacturer could elect to certify each of their edge codes as a separate formulation – testing each edge code separately and reporting these results as a distinct cumulative average for each edge code. This is allowed under the regulations. However, this option would increase compliance costs and is not required.

**Question 2: Do manufacturers need to report results or include results from experimental formulations or other research and development tests in the cumulative average reported to Ecology?**

No, manufacturers do not need to report data on experimental formulation or other research and development tests or include these results in the cumulative average reported to Ecology. When a manufacturer creates a new formulation they must certify it prior to offering it for sale in Washington State. When the manufacturer is ready to certify a product they should send a sample to the lab to be tested for the purposes of certification. This sample must match the formulation that will be sold in Washington. If future research and development work results in changes to a formulation sold in Washington, it must be recertified as a new formula.

**Question 3: Do manufacturers need to report data from conformity of production audits or include this data in the cumulative average reported to Ecology?**

No, manufacturers do not need to report data from conformity of production audits or include this data in the cumulative average reported to Ecology. However, if conformity of production audits indicate manufactured products do not meet the certification standards, these products should not be marked with a certification mark and should not be sold in Washington State. A manufacturer that marked a non-conforming product with a certification mark would be falsely certifying these products and could be subject to penalties or other enforcement actions.

**Question 4: Do manufacturers need to report data from incorrectly manufactured products or include this data in the cumulative average reported to Ecology?**

No, manufacturers do not need to report data from incorrectly manufactured products or include this data in the cumulative averages reported to Ecology. However, incorrectly manufactured products do not meet the certification standards, should not be marked with a certification mark and should not be sold in Washington State. A manufacturer that marked a non-conforming product with a certification mark would be falsely certifying these products and could be subject to penalties or other enforcement actions.

**Question 5: Do testing reports submitted in previous certification cycles need to be reported or included in cumulative averages reported to Ecology?**

No, manufacturers should not report data submitted in previous certification cycles or include these results in cumulative averages reported to Ecology. A manufacturer should only include testing results from the samples submitted for the most recent certification.

Thank you again for the opportunity to clarify the meaning of the Better Brakes Rules. If you have any further questions please feel free to contact Ian Wesley, the Better Brakes Coordinator, at 360-407-6747 or [ian.wesley@ecy.wa.gov](mailto:ian.wesley@ecy.wa.gov).

Sincerely,



Ken Zarker, Manager  
Pollution Prevention & Regulatory Assistance Section  
Hazardous Waste and Toxics Reduction Program

cc: Ian Wesley, Ecology Better Brakes Coordinator

**Response to Comments**  
**Hazardous Materials: Motor Vehicle Brake Friction Materials**  
**15-day Comment Period**  
**(June 16 – June 30, 2016)**

The document is organized into the following sections: [Comments outside the Scope of the Regulations](#), [Comments Addressed in the Final Statement of Reasons](#), and [Comments by Regulation Section](#). The Comments by Regulation Section are grouped as follows:

[66387.1 Definitions](#)

[66387.3 Self-Certification of Compliance](#)

[66387.4 Testing Certification Agency for Brake Friction Materials](#)

To make navigating in this document easier, hyperlinks have been added to each section listed above. These hyperlinks will take you to the section of interest.

**Comments outside the Scope of the Regulations**

One comment was received on a topic not covered in the regulations. This topic pertains to the clarification on specific exemptions found in law.

***Clarification on Exemptions Listed in Health and Safety Code sections 25250.55(g) and (h)***

Comment letter 3, Comment 1

Comment letter 3, Comment 3

Commenters request clarification on the exemption language in Health and Safety Code (HSC) section 25250.55(g) and 25250.55(h). Specifically, the commenter requests the Department to clarify that these exemptions apply to both brake friction materials manufactured under an original equipment service (OES) contract and as an aftermarket replacement part. As part of the clarification, the commenter also requests the Department create a definition for aftermarket replacement parts and original equipment service contract replacement parts.

**Response:** This comment is outside the scope of these regulations and will not be addressed. A detailed discussion on this topic is provided in the 45-day response to comments under the header “Clarification on Exemptions Listed in Health and Safety Code sections 25250.55(g) and (h).”

**Comments Addressed in the 45-day Response to Comments**

***Referencing the Standard’s Specific Year***

Comment letter 3, Comment 5

Commenter requests the Department not to reference the industry standard’s specific year in the text of the regulations without adding a caveat for the latest revision or edition.

**Response:** This comment was not incorporated into the final regulations. The third bullet in the 45-day response to comments under the header “Editorial Comments,” provides a detailed discussion.

## Comments Addressed in the Final Statement of Reasons

### *Acceptance of Previous Testing and Certification of Brake Friction Materials*

Comment letter 2, Comment 3

Commenter requests the Department to add language to the Final Statement of Reasons indicating that testing, certification, and marking performed prior to the adopting these regulations will be acceptable to California.

**Response:** The Department has added the following discussions to sections 66387.3 and 66387.7(b) in the Final Statement of Reasons to address this comment.

Section 66387.3:

Paragraph before discussion of section 66387.3(a):

Manufacturers are not required to retest brake friction material formulations registered with NSF International prior to the effective date of these regulations or relabel properly marked packaging if the brake friction material is compliant with the self-certification requirements in section 66387.3 and the marked proof of certification requirements described in section 66387.7. On and after the effective date of these regulations, manufacturers shall test their brake friction material formulations using the test method specified in the regulations.

Section 66387.7(b):

Brake friction materials that were tested, certified, and assigned environmental compliance markings prior to the effective date of these regulations and meet the requirements of section 66387.8(b), (c), or (d) by NSF International are considered compliant with these regulations. Brake friction material packaging marked with a certification mark issued by NSF International are also considered to be compliant with the certification mark requirements described in section 66387.7(b), (c) and (d).

Comment letter 2, Comment 4

Commenter requests the Department to adopt the SAE J2975:2011 testing standard cited in the State of Washington Better Brakes regulations or state in the regulations that testing performed according to SAE J2975:2011 will be acceptable in California as well.

**Response:** The Department does not see the need to change the SAE J 2975 standard to match the standard stated in the State of Washington regulations. The State of Washington has approved the use of SAE J 2975:2013 for testing brake friction material for compliance under the Better Brakes law. As stated earlier, brake friction material manufacturers are not required to retest their brake friction material formulations registered with NSF

International prior to the effective date of these regulations. On and after the effective date of these regulations, manufacturers shall test their brake friction material formulations using the test method specified in the regulations.

### LeafMark™

Comment letter 2, Comment 1

Comment letter 3, Comment 6

Commenters request the Department explicitly state in the rulemaking that the Automotive Aftermarket Suppliers Association's LeafMark™ is recognized and accepted as a certification mark in California.

**Response:** The Department has used the LeafMark™ as an example of a certification mark in the initial and final statement of reasons. Per section 66387.7(a)(3), the Department will post certification marks issued by a testing certification agency. Testing certification agency must submit their certification requirements which include the certification mark for approval by the Department.

Comment letter 2, Comment 2

Commenter requests the Department include language in the Final Statement of Reasons that stating while the use of the LeafMark™ is not required, the Department encourages its use.

**Response:** The Department has added the text below to the general discussion of section 66387.7 in the Final Statement of Reasons to address this comment.

The certification mark is part of the certification requirements submitted by the testing certification agency for the Department's approval per section 66387.4(b)(2)(C)9. Presently, the Department recognizes and accepts the AASA LeafMark™ as a certification mark issued by the testing certification agency, NSF International, as part of their certification requirements. The regulations do not require a manufacturer to specifically use the LeafMark™. However, the regulations do require the manufacturer to use a certification mark that is issued by a testing certification agency. Testing certification agencies must submit their certification requirements which include the certification mark to the Department for approval. Once these regulations become effective, the Department expects the current testing certification agency to submit their certification requirements for approval.

### Comments by Regulation Section

For specific regulation sections, the comments and their corresponding responses are provided in this section.

## 66387.1 Definitions

### 66387.1(o)

Comment letter 2, Comment 5

Commenter requests the Department to clarify that the terms “registrar” and “industry-registrar” are interchangeable.

**Response:** The following change was made to the definition:

The term “registrar” and “industry-sponsored registrar” ~~are is-~~ used by the industry when referring to this entity.

The following paragraph has been added to the discussion of section 66387.1(o) in the FSOR:

The phrase “industry-sponsored registrar” is also included in this definition since the terms “registrar” and “industry-sponsored registrar” are considered interchangeable. The term “industry-sponsored registrar” is used by the State of Washington to describe the organization that certifies and registers brake friction material formulations to meet the self-certification process outlined in their Better Brakes regulations. The “industry-sponsored registrar” is defined in section WAC 173-901-040(5) of the State of Washington Better Brakes regulations.

Comment letter 3, Comment 2

Commenter requests the department to clarify in the Final Statement of Reasons that the testing certification agency and the analytical laboratory are required to be separate entities and not directly involved in each other’s operations.

**Response:** The roles of “testing certification agency” and the “accredited or certified laboratory” are described throughout sections 66387.3, 66387.4, 66387.5, and 66387.6. The definition of a “testing certification agency” is 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 [emphasis added. Health and Safety Code section 25250.50(g)]. The testing certification agencies may have contracts with “accredited or certified laboratories” that meet the conditions listed in 66387.5. Since the California law allows the testing certification agency to have an accredited laboratory program, the Department does not see a need to make this distinction in the regulations or in the Final Statement of Reasons.

### **66387.3 Self-Certification of Compliance**

#### **Section 66387.3(c)**

Comment letter 3, Comment 4

Commenter requests the Department clarify the phrase “one complete set of testing results.” The commenter also suggests either using the phrase “one set of testing results” or “one complete set of testing results” in subsection (b) and (c) for consistency.

**Response:** In the Final Statement of Reasons, the detailed discussion for section 66387.3(c) includes clarification on the phrase “one set of testing results.” The discussion for section 66387.3(c) is provided below.

**Section 66387.3(c)** allows the manufacturer to use one set of testing results derived from a single sample of brake friction material that represents one brake friction formulation. To obtain a representative sample for the brake friction material formulation, at least three samples should be tested per brake friction material formulation.

In the regulations, “one set of test results” refers to the test results derived from a single sample of brake friction material that represents one brake friction material formulation. To obtain a representative sample for the brake friction material formulation, at least three samples should be tested per brake friction material formulation. This “one set of test results” refers to the testing results carried out to satisfy the requirements in section 66387.3(a). The “one set of test results” does not include testing results from experimental formulations, conformity of production audits, incorrectly manufactured products, or previous certification cycles.

This provision is necessary because it makes it clear that only the formulation needs to be tested and the results can be used for any number of brake pad products using the same formulation.

The phrase “one complete set of testing results” was changed to “one set of testing results” in this section for consistency.

### **66387.4 Testing Certification agency for Brake Friction Material**

#### **Section 66387.4**

Comment letter 3, Comment 7

Commenter requests the Department to enforce the requirement that the laboratory and the testing certification agency are separate entities according to the requirements in ISO/IEC 17065:2012 standard or the ISO/IEC Guide 65:1999 standard.

**Response:** Commenter requests that DTSC enforce a requirement that the laboratory and the testing certification agency are separate entities according to the requirements in ISO/IEC 17065:2012 standard or the ISO/IEC Guide 65:1999 standard. The standard does not

require these entities be separate; therefore DTSC is not making a change in the proposed regulation in response to this comment.

#### Section 66387.4(c)

##### Comment letter 1, Comment 1

Commenter expresses concern that the proposed change lacks transparency and accountability and essentially allows the testing certification to self-certify procedural changes.

**Response:** Based on the Department's authority in Health and Safety Code section 58012, the Department may request the current version of a testing certification agency's certification requirements to confirm compliance with the California Code of Regulations, title 22, section 66387.4, at the Department's discretion.

#### **COMMENTS RECEIVED DURING THE PERIOD THE MODIFIED TEXT WAS AVAILABLE TO THE PUBLIC**

The modified text was made available to the public for comment from June 16, 2016 through June 30, 2016. The Department received three letters during this period on the modified text.

#### **ALTERNATIVES THAT WOULD LESSEN ADVERSE ECONOMIC IMPACT ON SMALL BUSINESS**

No alternatives were proposed to the Department that would lessen any adverse economic impact on small business.

#### **ALTERNATIVES DETERMINATION**

The Department has determined that no alternative it considered or that was otherwise identified and brought to its attention would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

The regulations adopted by the Department are the only regulatory provisions identified by the Department that accomplish the goal of setting standards for self-certification of compliance using a testing certification agency, third-party accredited laboratories, analytical testing methodologies, a mark proof of certification to appear on brake friction materials, and a process to apply for an extension to the 2025 restrictions. The proposed regulations provide specificity and clarification to the statute, and assist manufacturers to comply with the law. Except as set forth and discussed in the summary and responses to comments, no other alternatives have been proposed or otherwise brought to the Department's attention.