

brakepad@DTSC

From: Schenk, Lawrence(David) <dschenk@nsf.org>
Sent: Friday, December 05, 2014 12:11 PM
To: brakepad@DTSC
Subject: RE: 15-day Comment Period on the Revised Informal Draft Regulations for the California Brake Pad Law
Attachments: California regulations - NSF notes (2014-12-05).docx

Hello Suzanne,

Attached are the NSF suggestions for the Brake Friction Material Law regulations.

Per our conversation earlier today, my understanding is that California does not require potential testing certification agencies have their friction material registration program on their ISO 17065 scope of accreditation. Instead, CA is only requiring that potential testing certification agencies be ISO 17065 accredited.

Feel free to contact me with any questions about my edits. I tried to make everything consistent but I could've missed something.

Thank you,

L. David Schenk III
Engineer

NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105
Phone: 734-769-8010 ext. 2404
Email: LSchenk@nsf.org
Website: www.nsf.org

From: brakepad@DTSC [<mailto:brakepad@dtsc.ca.gov>]
Sent: Friday, November 14, 2014 5:28 PM
To: brakepad@DTSC
Cc: brakepad@DTSC
Subject: 15-day Comment Period on the Revised Informal Draft Regulations for the California Brake Pad Law

DTSC and is requesting comments on the revised draft informal regulation for the Brake Friction Material Law (Health and Safety Code sections 25250.50 et.seq.) by **Friday, December 5, 2014**. The revised draft informal regulations are available at http://www.dtsc.ca.gov/PollutionPrevention/upload/Revised_draft_strawman_reg_language_-_11132014.pdf. Comments may be submitted via e-mail to: brakepad@dtsc.ca.gov or via regular mail to:

Department of Toxic Substances Control

Attn: Comments on Draft Informal Regulations for Brake Friction Material Law

P.O. Box 806, Mail Station/Code: SPWP/MS 12A

Sacramento, California 95812-0806

If you have difficulty downloading or accessing the document, please contact Suzanne Davis via email at Suzanne.davis@dtsc.ca.gov or via phone at 916-327-4206.

NOTICE: This email and its contents/attachments may be confidential and are intended solely for the individual to whom it is addressed.

If you are not the named addressee or if this email is otherwise received in error, please immediately notify the sender without

reading it and do not take any action based on its contents or otherwise copy or disclose it to anyone. Any opinions or views expressed in

this transmission are solely of the author and do not necessarily represent those of NSF International or its affiliates.

Regulations Text

DIVISION 4.5, CALIFORNIA CODE OF REGULATIONS, TITLE 22 CHAPTER 25. HAZARDOUS MATERIALS: MOTOR VEHICLE BRAKE FRICTION MATERIALS

66275.1 Definitions

- (a) "Accredited laboratory" and "certified laboratory" mean a laboratory that meets the requirements of California Code of Regulations, title 22, section 66275.5.
- (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 Program or by the California Environmental Laboratory Accreditation Program.
- (c) "Alternative method" means a chemical analysis testing method or chemical analysis sample processing method that is not cited in testing protocol SAE J2975:2013.
- (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) "Rotor" means the rotating portion of a motor vehicle brake system including, but not limited to, brake disks and brake drums.
- (f) "Department" means the Department of Toxic Substances Control.
- (g) "Environmental compliance mark" means a three character alphanumeric identification code that meets the requirements of California Code of Regulations, title 22, section 66275.8.
- (h) "Manufacturer" except where otherwise specified in Health and Safety Code section 25250.50, subdivision (e) means: ~~(1)~~
- (1) a manufacturer or assembler of motor vehicles or motor vehicle equipment, and
- (2) ~~(2)~~ an importer of motor vehicles or motor vehicle equipment for resale.
- ~~(h)~~ A "manufacturer" includes a vehicle brake friction materials manufacturer.
- (i) "Marked proof of certification" means the unique identification code and environmental compliance mark marked on the brake friction material and 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 requirements in Health and Safety Code section 25250.51, 25250.52, and 25250.53.
- (j) "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.
- (k) "Regulated constituents" means asbestiform fibers, cadmium and its compounds, chromium (VI)-salts, lead and its compounds, and mercury and its compounds.
- (l) "Secretary" means the California Environmental Protection Agency secretary.
- (m) "Testing certification agency" means a third-party testing certification agency that is utilized by a vehicle brake friction materials manufacturer and that has an accredited laboratory program that provides testing in accordance with the certification agency requirements that are approved by the department. The term "registrar" is used by the industry when referring to this entity.
- ~~(m)~~(n) "Unique identification code" means the combination of "Company Assigned ID" and "Formulation Identification" referenced in SAE J866:JUL2012 section 3.

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

Formatted

Formatted: Indent: Left: 0.5", No bullets or numbering

Comment [11]: Added because the addition of a definition for "Unique identification code" means that the environmental code would no longer be part of the "Marked proof of certification" without this change.

66275.2 References

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

- (1) ISO/IEC Guide 65:1996, "General requirement for bodies operating product certification systems," dated 1996, available from the International Organization for Standardization (ISO)
- ~~(1)~~(2) 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
- ~~(2)~~(3) 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
- ~~(3)~~(4) 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;
- ~~(4)~~(5) 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;
- ~~(5)~~(6) SAE J 2975:2013, "Measurement of Copper and Other Elements in Brake Friction Materials," dated 2013, available from the Society of Automotive Engineers (SAE) Customer Service, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

Comment [12]: My understanding is that ISO 17065 and ISO Guide 65 are equivalent to each other (ISO 17065 effectively superseded ISO Guide 65).

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

66275.3 Self-certification of compliance

(a) Manufacturers of brake friction material must 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 66275.5.
- (2) **Step 2:** Receive confirmation from the laboratory that all 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 must contact the testing certification agency and confirm that all laboratory testing results needed to certify a given friction material formulation was 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 66275.6.
- (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 a unique

identification code ending in the appropriate environmental compliance marking as described in California Code of Regulations, title 22, section 66275.7.

- (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
 - 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 meet all of the requirements of Health and Safety Code section 25250.60 subdivision (c) (2), subdivision (e) (2), and subdivision (g)(2).

The statement shall include but is not limited to language identical or similar to that specified in California Code of Regulations, title 22, section 66275.3, subsection (a)(4)(B)1.

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 certifications set forth in this 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)(2), subdivision (e)(2), and subdivision (g)(2).

- (5) **Step 5:** Receive confirmation from the testing certification agency that each brake friction material that complies with the requirements of this chapter are posted on the Internet in a publicly accessible and searchable data base or list.
- (A) The testing certification agency shall notify the Department either in writing or electronically.
 1. Electronic notifications may be submitted to the Department via electronic mail (brakepad@dtsc.ca.gov) for the brake pad law on the Department's Web site at <http://www.dtsc.ca.gov>.
 2. Written notifications may be submitted to the Department via certified mail, return receipt requested, at the following address: Department of Toxic Substances Control, Safer Products and the Workplace 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.
 - (B) The notification shall include the manufacturer's name, the brake friction material formulation identifier, 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 data base or list changes using the notification procedures in subsection (a) and (b) of this section.
- (6) **Step 6:** Ensure that brake friction material is marked with proof of certification in accordance with California Code of Regulations, title 22, section 66275.7 and Health and Safety Code section 25250.60, subdivision (j).
- (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.
 - (c) Manufacturers of brake friction material are responsible for the accuracy of all information transmitted to the testing certification agency.

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

66275.4 Testing Certification Agency for Brake Friction Material

The "testing certification agency" shall serve as the official registration source for self-certified brake friction

~~materials~~. The "testing certification agency" shall post and maintain the self-certification of brake friction

~~materials on the internet which includes the marked proof of certification unique identification code and the identifying-identify of the manufacturer entity which registered the unique identification code through the testing certification agency.~~

The Department shall approve the certification-registration requirements used by the "testing certification agency"

to facilitate the acceptance of the mark of proof in all 50 states and United States territories per Health and Safety Code section 25250.60, subdivision (j).

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

The "testing certification agency" shall use accredited laboratories that meets the requirements of California Code of Regulations, title 22, section 66275.5. The testing certification agency shall and maintains accreditation to the either the ISO/IEC 17065:2012 standard or the ISO/IEC Guide

Comment [13]: Changed this from referencing solely the product's manufacturer to the registering entity because the product's manufacturer will not necessarily be the company registering the edge code.

For example, some manufacturers are requesting that their distributor register the edge code for them. And some distributors are going along with that request.

Therefore, this clause should reference the registering entity since the testing certification agency will not necessarily KNOW that the registering entity is the product's manufacturer.

Comment [14]: As written, this requires that test LABS maintain accreditation to ISO/IEC 17065. I think California wants to require that the testing certification agency maintain ISO/IEC 17065 accreditation. If so, then this revised wording removes the ambiguity about who is required to maintain the ISO/IEC 17065 accreditation.

65:1996 standard. 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 66275.5. 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 66275.5, subsection (a), then the testing certification agency shall follow the process outlined in California Code of Regulations, title 22, section 66275.5, subsection (b) thru (d), and obtain approval from the Department prior to testing the brake friction material;
 - (2) Receive confirmation from the laboratory that the chemical analysis for each brake friction material formulation was conducted using the testing methodology pursuant to California Code of Regulations, title 22, section 66275.6, 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 66275.6, 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 method was approved pursuant California Code of Regulations, title 22, section 66275.6, subsection (l);
 - (3) Issue a “certification of compliance” ~~for-to~~ the brake friction material’s registering entity so that the registering entity may declaring-declare that its formulation(s) complies with Health and Safety Code sections 25250.51, 25250.52, or 25250.53.
 - (4) Publish all self-certifications on the internet pursuant to Health and Safety Code section 25250.60, subdivision (h);
 - (5) Post a marked proof of certification that follows the process outlined in California Code of Regulations, title 22, section 66275.7, subsection (c); and
 - (6) Assign the appropriate environmental compliance mark pursuant to California Code of Regulations, title 22, section 66275.7, subsection (c)(3).
- (b) **What is the process for obtaining the Department’s approval on certification agency 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 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
 - (B) Contact person’s job title
 - (C) Contact person’s e-mail address
 - (D) Business name
 - (E) Business address
 - (F) Business phone number
- (2) The organization’s brake friction material certification request for approval must include copies of the organization’s:
 - (A) Qualifications as a material and/or product certification organization
 - (B) Certificate of ~~Conformity Accreditation~~ for either:
 1. ISO/IEC 17065:2012; or
 2. ISO/IEC Guide 65:1996

Comment [15]: What constitutes an organization’s “Qualifications” as a material and/or product certification organization?

Recommend removing this point unless specific subpoints are listed which specify what the required “qualifications” are.

Formatted

Comment [16]: My understanding is that ISO 17065 and ISO Guide 65 are equivalent to each other (ISO 17065 effectively superseded ISO Guide 65).

- (C) Standard Operating Procedures (SOP) for Material and/or Product Certification;
- (D) Proposed brake friction material certification 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 66275.6;
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. Recertification cycle for each certified brake friction material is performed at least every 3 years under this program;
4. Copy of the procedure used to ensure every self-certified brake friction material formulation has a unique identification code;
5. Copy of the proposed manufacturer declaration of Self-Certification of Compliance;
6. Copy of the proposed format for the “marked proof of certification” that meets the requirements in California Code of Regulations, title 22, section 66275.7;
7. Copy of the procedure regarding self-certification information on brake friction materials on their Web site. This includes, but is not limited to, the list of self-certified materials, description of the certification registration procedures, date of the last update of the list of certified registered materials, description and graphics illustrating the marked proof of certification on the pad and packaging logo.
8. Internet address where all certifications will be published and available to the public at no cost; and
9. Copy of the trademark for a packaging logo if one is issued by the testing certification agency.

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

- (3) For electronic notifications, a request may be submitted via electronic mail (brakepad@dtsc.ca.gov) for the brake pad law on the Department’s Web site at <http://www.dtsc.ca.gov>.
- (4) For written requests, a request may be submitted to the Department via certified mail, return receipt requested, at the following address: Department of Toxic Substances Control, Safer Products and the Workplace Program, P.O. Box 806, Sacramento, CA 95812-0806, with the words “Attention: California Testing Certification Agency Request for Approval” prominently displayed on the front of the envelope.

(c) **How will the Department notify a testing certification 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 application. If the Department finds the testing certification agency requirements meets California Code of Regulations, title 22, section 66275.4, subsection (a), then a letter will be sent to the testing certification agency that provides details on the basis of the approval and the associated conditions and limitations, if any, for the approval. If the Department does not find the testing certification agency requirements meet subsection (a) of this section, then the letter will list the reasons the

certification agency requirements did not meet subsection (a) of this section.

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 66275.4, subsection (b)(2)(E) for additional laboratories to be used by the testing certification agency.

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

66275.5 Certified laboratories for brake friction materials

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

To certify compliance, a manufacturer of brake friction material must 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 2975:2013, and maintains accreditation to at least one of the following:

- (1) ISO/IEC 17025:2005 from a lab 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; or
- (3) By the California environmental laboratory accreditation program, as of the effective date of this chapter.

(b) **May a manufacturer of brake friction material use an alternative laboratory accreditation not listed in California Code of Regulations, title 22, section 66275.5, subsection (a)?**

A manufacturer of brake friction material may 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 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 to consider an alternative laboratory accreditation not listed in subsection (a) of this section 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. Once an alternative laboratory accreditation has been approved by the Department per California Code of Regulations, title 22, section 66275.5, subsection (d), any brake friction material manufacturer may use the alternative laboratory accreditation for certification.

(c) **What is the process for requesting the Department to approve an alternative laboratory accreditation not listed in California Code of Regulations, title 22, section 66275.5, 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
 - (B) Contact person's job title
 - (C) Contact person's e-mail address

- (D) Business name
- (E) Business address
- (F) Business phone number

(2) A copy of alternative laboratory accreditation standard or the proficiency testing procedures for the laboratory accreditation program

~~(3)~~(3) Information and data sufficient to prove to the Department that the alternate laboratory accreditation is equivalent to or better than the standards or laboratory accreditation programs listed in subsection (a) of this section

~~(4)~~(4) For electronic notifications, a request may be submitted via electronic mail (brakepad@dtsc.ca.gov) for the brake pad law on the Department's Web site at <http://www.dtsc.ca.gov>.

~~(5)~~(5) For written requests, a request may be submitted to the Department via certified mail, return receipt requested, at the following address: Department of Toxic Substances Control, Safer Products and the Workplace Program, P.O. Box 806, Sacramento, CA 95812-0806, with the words "Attention: California Brake Pad Request for Approval" prominently displayed on the front of the envelope.

(d) **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 on whether the alternative laboratory accreditation has been approved within 90 days of receipt of the application. If the Department finds the alternative laboratory accreditation is equivalent to or better than those listed in California Code of Regulations, title 22, section 66275.5, 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, the Department shall provide the reasons in writing for the denial.

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

66275.6 Testing methodology 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 66275.5; and
 - (2) Using the testing protocol SAE J 2975:2013 or an alternative method approved under California Code of Regulations, title 22, section 66275.6, subsection (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, speciated Chromium (VI)-salts testing is not required
 - (4) Copper and its compounds;

(5) Lead and its compounds; and

(6) Mercury and its compounds.

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

The manufacturer of brake friction material is responsible for the accuracy of the laboratory testing results reported to the testing certification agency.

(d) **What are the maximum concentrations the regulated constituents and copper which the brake friction materials may have to be certified?**

To be used for certification, the cumulative average of all testing 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 asbestiform fibers, chromium(VI)-salts, lead and its compounds, mercury and its compounds;
- (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 25205.51, 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 California Code of Regulations, title 22 section 66275.6, subsection (d).

(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 2975:2013.

(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?**

All laboratory testing results for a brake friction material must be transmitted from the testing laboratory directly to a testing certification agency.

(1) Testing reports transmitted from the laboratory to the testing certification agency shall include the minimum information specified in SAE ~~J8297J~~ 2975:2013.

(A) If an alternate method of testing approved under California Code of Regulations, title 22, section 66275.6, subsection (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 may include either the minimum information specified in SAE J 2975:2013 or the minimum information specified in the alternated method of testing utilized.

(2) 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. This comparison shall report whether the cumulative average concentration does not exceed the following concentrations:

Formatted: Indent: Left: 1.38", Hanging: 0.25"

- (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% by weight of copper on and after January 1, 2021, and
- (D) 0.5% weight of copper on and after January 1, 2025.

(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 not need to be included in the testing results transmitted to the testing certification agency.

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

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 certification.

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

A manufacturer of brake friction material may use an alternative method if the alternative method is approved by the Department under California Code of Regulations, title 22, section 66275.6, subsection (l), in advance of use for self-certification. The company or agency proposing the alternative method shall be responsible for generating data that is sufficient to demonstrate to the Department that the alternative method is equivalent to or better than SAE J 2975:2013. Once an alternative method has been approved by the Department, any manufacturer of brake friction material may use the approved alternative method for certification. The Department shall only approve an alternative method:

- (1) When a an alternative method is proposed by at least one of the following:
 - (A) Manufacturer of brake friction material; or
 - (B) Testing certification agency approved by the Department under California Code of Regulations, title 22, section 66275.4 subsection (c); or
 - (C) A testing laboratory used by a testing certification agency approved by the Department under California Code of Regulations, title 22, section 66275.4 subsection (c)
- (2) When the entity proposing an alternative method has provided sufficient evidence to demonstrate that the proposed alternative method is equivalent or better than SAE J 2975:2013;
- (3) When the alternative method does not involve alterations to the sample preparation method outlined in SAE J 2975:2013 section 4.1, and
- (4) When the proposed alternative method is publicly available.

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

An entity may submit a request for approval on an alternative method in writing or electronically. The request shall 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 J2975:2013; 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 66275.5 subsection (a).
 - (2) A copy of the proposed alternative method
 - (3) A copy of the Standard Operating Procedure (SOP) for the alternative method
 - (A) If the alternative method is a standard or reference method, a demonstration of capability (DOC) package must be submitted as outlined in the NELAC Institute Standard, Module 4: Quality Systems for Chemical Testing.
 - (B) If the 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) For electronic notifications, a request may be submitted via electronic mail (brakepad@dtsc.ca.gov) for the brake pad law on the Department's Web site at <http://www.dtsc.ca.gov>.
 - (5) For written requests, a request may be submitted to the Department via certified mail, return receipt requested, at the following address: Department of Toxic Substances Control, Safer Products and the Workplace Program, P.O. Box 806, Sacramento, CA 95812-0806, with the words "Attention: California Brake Pad Request for Approval" prominently displayed on the front of the envelope.
- (I) **How will the Department notify a manufacturer of brake friction material that an alternative testing method has been approved?**

The Department shall notify the manufacturer of brake friction material in writing on whether the alternative method was approved within 90 days of receiving the application. If the Department finds the alternative method is equivalent to or better than SAE J 2975:2013 the Department shall provide the basis of the approval. If the Department does not find the alternative method equivalent to or better than SAE J 2975:2013, the Department shall provide the basis the basis for the denial.

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

66275.7 Marked proof of certification

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

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. The certification mark on the product serves to notify end users of the brake friction material that the product is compliant with the law. While the identification code and environmental compliance marking is used to link the product to laboratory testing results and self-certification documentation, together the code and 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 certification the manufacturer is 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 66275.8, with which it has been marked;
- (2) The brake friction material has been registered with testing certification agency; and
- (3) Self-certification documentation has been submitted to the testing certification agency and is available on their Web site.

(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 certification.

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

A manufacturer of brake friction material shall:

- (1) Mark its brake friction material in accordance with the SAE J 866:JUL2012. This chapter does not require 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 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 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 ~~unique identification code~~ **brake friction material's marking includes** a code that contains 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.

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

Brake friction material packaging shall be marked with a certification mark that is issued by the testing certification agency and provided in the proposed brake friction material certification process per California Code of Regulations, title 22, section 66275.4, subsection (b)(2)(D). This packaging mark is intended to certify 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.

66275.8 Environmental compliance marking

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

The environmental compliance marking is the last letter or last two letters ~~in the unique identification code~~ marked on brake friction materials. 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.

(b) **What does the environmental compliance marking "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 specified concentrations:

- (1) Asbestiform fibers, 0.1 percent by weight;
- (2) Cadmium and its compounds, 0.01 percent by weight;
- (3) Chromium (VI)-salts, 0.1 percent by weight;
- (4) Lead and its compounds, 0.1 percent by weight; or
- (5) Mercury and its compounds, 0.1 percent by weight.

(c) **What does the environmental compliance marking "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

Comment [17]: With the specific definition of "Unique identification code" as the "Company Assigned ID" and "Formulation Identification" referenced in SAE J866:JUL2012, this section must be changed as by definition the unique identification code cannot also contain the environmental compliance code.

Comment [18]: With the specific definition of "Unique identification code" as the "Company Assigned ID" and "Formulation Identification" referenced in SAE J866:JUL2012, this section must be changed as by definition the unique identification code cannot also contain the environmental compliance code.

contain any of the compounds 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)** percent copper by weight.

(d) **What does the environmental compliance marking "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 compounds listed in subsection (b) of this section in amounts exceeding the specified concentrations and that the brake friction material contains less than 0.5 percent copper by weight.

66275.9 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) A manufacturer will 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 on whether the brake friction material is intended for use in original equipment or replacement parts
 2. Identification of the brake pads and/or 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 of extension request (initial or renewal):
 1. For an initial extension request, the amount of time requested by the manufacturer may be for 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 based on Health and Safety Code sections 25250.54, subdivision (a)(2), subdivision (a)(4), and the assessment of "safe and available" alternatives per Health and Safety Code section 25250.54, subdivision (e)(3). The documentation should also include information to allow the Department to determine the quantity of copper that would be emitted if the extension is granted per Health and Safety Code section 25250.54, subdivision (b)(1).
- (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) Electronic notifications may be submitted to the Department via the electronic mailbox (brakepad@dtsc.ca.gov) for the brake pad law on the Department's Web site at <http://www.dtsc.ca.gov>.
- (4) Written notifications may be submitted to the Department via certified mail, return receipt requested, at the following address: Department of Toxic Substances Control, Safer Products and the Workplace 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.
- (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 will submit another extension application in accordance with California Code of Regulations, title 22, section 66275.9, subsection (a). The documentation to renew an extension shall include information on the original 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?**
A "manufacturer" as defined in California Code of Regulations, title 22, section 66275.1, subsection (h) may apply for an extension to the January 1, 2025 deadline.
- (d) **Will the Department charge a processing fee? How will this be calculated?**
Under Health and Safety Code section 25250.54, subdivision (j), the Department shall assess a fee for each extension application that is sufficient to cover actual costs incurred in implementing the extension process. The fee shall include travel costs incurred for each advisory committee meeting held, DTSC staff time spent implementing the extensions through the public review process, the costs associated with California Air Resources Board and the State Water Resources Control Board to review submitted extensions, and the costs associated with the secretary to review and approve submitted extensions.

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