Chapter 173-901 WAC
BETTER BRAKES

WAC

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WAC 173-901-010 Purpose. (1) This chapter implements chapter 70.285 RCW, which mandates a phase out of the use of copper, asbestos, and several heavy metals in brake friction material that is sold or offered for sale in Washington state.

(2) As brake friction material wears down, copper and other metals are deposited on roadways, where they are washed into our streams and rivers. Copper is highly toxic to fish and other aquatic species. Young salmon are especially susceptible to the effects of copper. Removing copper and other toxic metals from brake materials will help to clean up water bodies around the state.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-010, filed 10/19/12, effective 11/19/12.]

WAC 173-901-020 Applicability—Who must comply with the chapter? This chapter applies to:

(1) Manufacturers, wholesalers, distributors, installers, and retailers of brake friction materials that are sold or offered for sale in Washington state; and

(2) Manufacturers, wholesalers, distributors, and retailers of motor vehicles containing brake friction materials that are sold or offered for sale in Washington state.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-020, filed 10/19/12, effective 11/19/12.]

WAC 173-901-030 Applicability—Which friction materials must comply with this chapter? (1) This chapter applies to brake friction materials designed for use on motor vehicles, as defined in RCW 46.04.320, that are subject to licensing requirements under RCW 46.16A.030.

(2) Some brake friction materials are exempted from this chapter by chapter 70.285 RCW. These include brake friction materials designed for use on:

(a) Motorcycles as defined in RCW 46.04.330;

(b) Motor vehicles employing internal-closed-oil-immersed motor vehicle brakes or similar brake systems that are fully contained and emit no debris or fluid under normal operating conditions;

(c) Military combat vehicles;

(d) Race cars, dual-sport vehicles, or track day vehicles, whose primary use is for off-road purposes and are permitted under RCW 46.16A.320;

(e) Collector vehicles, as defined in RCW 46.04.126; or

(f) Motor vehicle brakes designed primarily to hold motor vehicles stationary and not for use while motor vehicles are in motion.

(3) Some brake friction materials are exempt from certain requirements of this chapter. These include:

(a) Brake friction material manufactured prior to 2015 is exempt from WAC 173-901-050 (1) and (2), and 173-901-060. This exemption expires on January 1, 2025;

(b) Brake friction material manufactured prior to 2021 is exempt from WAC 173-901-050(2). This exemption expires on January 1, 2031;

(c) Brake friction material manufactured as part of an original equipment service contract for vehicles manufactured prior to January 1, 2015, is exempt from WAC 173-901-050 (1) and (2); and

(d) Brake friction material manufactured as part of an original equipment service contract for vehicles manufactured prior to January 1, 2021, is exempt from WAC 173-901-050(2).

(4) Friction materials that can be used on both exempted and nonexempted vehicles must comply with this chapter unless they are clearly labeled as designed for a specific use that is exempted from the requirements of chapter 70.285 RCW and this chapter.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-030, filed 10/19/12, effective 11/19/12.]

WAC 173-901-040 Definitions. (1) **"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. "Rotor" means the rotating portion of a motor vehicle brake system including, but not limited to, brake disks and brake drums.

(2) **"Brake friction material manufactured as part of an original equipment service contract"** means 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. If there are any changes to the

design of the service part's brake friction formulation, the product is no longer brake fiction material manufactured as part of an original equipment service contract; and

(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. The brake friction material manufacturer may only sell these parts directly to the other party to the contract, the vehicle manufacturer.

(3) **"Certification mark"** has the same meaning as in 15 U.S.C. Sec. 1127.

(4) **"Department"** means the department of ecology.

(5) **"Industry-sponsored registrar"** means an organization or organizations designated by one or more of the entities listed in WAC 173-901-020 to certify and register compliance with the requirements of chapter 70.285 RCW and this chapter on behalf of the designating entity or entities.

(6) **"ISO"** means the International Standards Organization.

(7) **"Manufacturer"** means a person manufacturing or assembling motor vehicles or motor vehicle equipment, or importing motor vehicles or motor vehicle equipment for resale. This chapter places differing requirements on manufacturers of motor vehicles and manufactures of brake friction materials. In each instance the term "manufacturer" is used, this chapter identifies which type of manufacturer is referred to.

(8) **"Motor vehicle"** does not include:

(a) Motorcycles as defined in RCW 46.04.330;

(b) Motor vehicles employing internal-closed-oil-immersed motor vehicle brakes or similar brake systems that are fully contained and emit no debris or fluid under normal operating conditions;

(c) Military combat vehicles;

(d) Race cars, dual-sport vehicles, or track day vehicles, whose primary use is for off-road purposes and are permitted under RCW 46.16A.320; or

(e) Collector vehicles, as defined in RCW 46.04.126.

(9) **"Motor vehicle brake"** means an energy conversion mechanism used to retard or stop the movement of a motor vehicle. Motor vehicle brake does not include brakes designed primarily to hold motor vehicles stationary and not for use while motor vehicles are in motion.

(10) **"Regulated constituents"** means:

(a) Asbestiform fibers;

(b) Cadmium and its compounds;

(c) Chromium (VI)-salts;

(d) Lead and its compounds; and

(e) Mercury and its compounds.

(11) **"SAE"** means the SAE International.

(12) **"Small volume motor vehicle manufacturer"** means a manufacturer of motor vehicles with Washington annual sales of less than one thousand new passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and heavy-duty engines based on the average number of vehicles sold for the three previous consecutive model years.

(13) **"Specified concentrations"** means, for each of the following:

(a) Asbestiform fibers, 0.1 percent by weight;

(b) Cadmium and its compounds, 0.01 percent by weight;

(c) Chromium (VI)-salts, 0.1 percent by weight;

(d) Lead and its compounds, 0.1 percent by weight;

(e) Mercury and its compounds, 0.1 percent by weight; and

(f) Beginning January 1, 2021, for copper and its compounds, 5 percent by weight.

(14) **"Vehicle dealer"** has the same meaning as defined in RCW 46.70.011.

(15) **"Wholesaler, distributor, installer, and retailer"** includes any person that sells or offers to sell brake friction materials to consumers in the state of Washington, and any person that sells or offers to sell brake friction materials to such person. "Selling or offering to sell brake friction material" includes installing or offering to install brake friction material in a vehicle for a fee.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-040, filed 10/19/12, effective 11/19/12.]

WAC 173-901-050 Prohibition on the sale of certain brake friction materials. (1) Beginning January 1, 2015, no manufacturer, wholesaler, distributor, installer, or retailer of brake friction material nor any manufacturer of motor vehicles may sell or offer for sale brake friction material in Washington state that:

(a) Contains asbestiform fibers in concentrations exceeding 0.1 percent by weight;

(b) Contains cadmium and its compounds in concentrations exceeding 0.01 percent by weight;

(c) Contains chromium (VI)-salts in concentrations exceeding 0.1 percent by weight;

(d) Contains lead and its compounds in concentrations exceeding 0.1 percent by weight; or

(e) Contains mercury and its compounds in concentrations exceeding 0.1 percent by weight.

(2) Beginning January 1, 2021, no manufacturer, wholesaler, retailer, installer or distributor of brake friction material nor any manufacturer of motor vehicles may sell or offer for sale brake friction material in Washington state containing more than five percent copper and its compounds by weight.

(3) Exemptions:

(a) Brake friction material manufactured prior to 2015 is exempt from subsections (1) and (2) of this section for the purposes of clearing inventory. This exemption expires January 1, 2025.

(b) Brake friction material manufactured prior to 2021 is exempt from subsection (2) of this section for the purposes of clearing inventory. This exemption expires January 1, 2031.

(c) Brake friction material manufactured as part of an original equipment service contract for vehicles manufactured prior to January 1, 2015, is exempt from subsections (1) and (2) of this section. For more information about parts manufactured as part of an original equipment service contract see WAC 173-901-150.

Brake friction material manufactured as part of an original equipment service contract for vehicles manufactured prior to January 1, 2021, is exempt from subsection (2) of this section. For more information about parts manufactured as part of an original equipment service contract see WAC 173-901-150.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-050, filed 10/19/12, effective 11/19/12.]

WAC 173-901-060 Self-certification of compliance. (1) Manufacturers of brake friction material must certify to the department that any brake friction material that is sold or offered for sale in Washington state complies with the requirements of chapter 70.285 RCW and this chapter using the following process:

(a) **Step 1:** Submit a sample of each brake friction material for laboratory testing. A brake friction material manufacturer may either:

(i) Submit a brake friction material sample directly to a laboratory accredited in accordance with WAC 173-901-070 for testing in accordance with WAC 173-901-080; or

(ii) Submit a sample of brake friction material to an industry-sponsored registrar that will send the sample to a laboratory accredited in accordance with WAC 173-901-070 for testing in accordance with WAC 173-901-080, on behalf of the brake friction material manufacturer.

(b) **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.

(c) **Step 3:** Ensure that each brake friction material that complies with the requirements of chapter 70.285 RCW and this chapter is assigned a unique identification code ending in the appropriate environmental compliance marking as described in WAC 173-901-100.

(d) **Step 4:** Ensure that an industry-sponsored registrar lists each brake friction material that complies with the requirements of this chapter on the internet in a publicly accessible and searchable data base or list. A link to this data base or list must be provided to the department and the department must be notified if the internet address of this data base or list changes.

(e) **Step 5:** Ensure that self-certification documentation is submitted to an industry-sponsored registrar for transmission to the department on behalf of the brake friction material manufacturer. Self-certification documentation must:

(i) Include the contact information for the brake friction material manufacturer;

(ii) Include a signed and dated statement by an authorized representative of the brake friction material manufacturer declaring under penalty of perjury according to the laws of the state of Washington 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 chapter 70.285 RCW and this chapter; and

(iii) Be in a form and format prescribed by the department.

(f) **Step 6:** Ensure that the registrar then transmits the self-certification documentation and laboratory testing results, on behalf of the brake friction material manufacturer, to the department. Self-certification documentation and test results must be transmitted in a quarterly report. The report must:

(i) Be in an electronic form and format prescribed by the department;

(ii) Contain a table showing each friction material sold or offered for sale in Washington state as identified by its unique identification codes and the cumulative average of all laboratory testing results for a given friction material demonstrating that the identified friction material complies with the requirements of chapter 70.285 RCW and this chapter. This information must be reported in accordance with WAC 173-901-080(5); and

(iii) Contain the self-certification documentation submitted to the registrar.

(g) **Step 7:** Ensure that brake friction material and its packaging is marked with proof of certification in accordance with WAC 173-901-090.

(2) There is no need to submit self-certification documentation for individual brake friction materials to the department between the regular quarterly reports.

(3) 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.

(4) Manufacturers of brake friction material are responsible for the accuracy of all information transmitted to the department. Manufacturers of brake friction materials may implement quality controls not otherwise specified above to ensure the accuracy of information transmitted to the department.

(5) Provided that each step is completed, manufacturers of brake friction material may alter the order of the process, in so far as the preceding steps are not required for the completion of subsequent steps. For example, a unique identification code may be issued at the beginning of the process or the industry-sponsored registrar may add compliant brake friction materials to the publicly available data base or list after the self-certification documentation has been submitted to the department.

(6) **Prerequisites for certification:**

(a) A manufacturer of brake friction material must file an initial baseline report as described in WAC 173-901-110, or obtain a waiver from this report under WAC 173-901-110(7), before it may certify compliance with the requirements in chapter 70.285 RCW and this chapter.

(b) A manufacturer of brake friction material that has received a penalty under this chapter may not certify other products until the penalty is paid.

(7) **Updating certification:** Manufacturers of brake friction material must recertify each previously certified brake friction material that is still being manufactured at least once every three years.

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 meets the requirements for the regulated constituents, do not need to be submitted for new testing to be recertified prior to 2021.

(8) **Exemption:** Brake friction material manufactured prior to 2015 is exempt from this section.

(9) **Optional certification:** A manufacturer of brake friction material that is not required to comply with the requirements of this law may certify compliance and mark brake friction materials in accordance with this chapter, provided that it certifies the product in accordance with this section.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-060, filed 10/19/12, effective 11/19/12.]

WAC 173-901-070 Which laboratories must a manufacturer of brake friction material use to certify compliance with this chapter? (1) 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 J2975:2011 testing method, and that has been found to be competent to perform the specific testing methods described by SAE J2975:2011 by maintaining accreditation:

(a) To the ISO 17025:2005 standard by 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;

(b) By any accreditation body that is recognized by the National Environmental Laboratory Accreditation Program, as of the effective date of this chapter; or

(c) By the Washington state environmental laboratory accreditation program under RCW 43.21A.230 and chapter 173-50 WAC.

(2) A manufacturer of brake friction material may certify compliance using testing results generated by a laboratory accredited to an alternative standard or by a laboratory accreditation body not listed in subsection (1) of this section if the alternative standard or accreditation body is approved by the department in advance of testing results being used for certification. The brake friction material manufacturer, laboratory, or laboratory accreditation body proposing the alternative shall be responsible for generating data sufficient to demonstrate to the department that these alternatives are equivalent to or better than the standards or accreditation bodies listed in subsection (1) of this section. Once an alternative laboratory standard or accreditation body has been approved by the department, any brake friction material manufacturer may use the standard or accredited laboratories for certification.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-070, filed 10/19/12, effective 11/19/12.]

WAC 173-901-080 How to test brake friction materials and report results. (1) The manufacturer of brake friction material offered for sale in Washington state must ensure that its brake friction materials sold or offered for sale in Washington state are tested:

(a) By a laboratory accredited in accordance with WAC 173-901-070; and

(b) Using the testing protocol SAE J2975:2011 or an alternative testing method or protocol approved under subsection (9) of this section.

(2) Manufacturers of brake friction material must ensure that brake friction material is tested for each of the following:

(a) Antimony;

(b) Asbestiform fibers;

(c) Cadmium;

(d) Chromium (VI);

(e) Copper;

(f) Lead;

(g) Mercury;

(h) Nickel; and

(i) Zinc.

(3) **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 department.

(4) **How many times does each friction material need to be tested?** As SAE J2975:2011 recommends, all testing for the regulated constituents, copper, nickel, zinc, and antimony must be done at least in triplicate.

(a) Due to the margin of error in the test method, additional testing may be required to demonstrate that the brake friction material contains less than the specified concentrations of each of the regulated constituents and copper. 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 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 J2975:2011. The additional testing results would then need to be calculated into the cumulative average of all testing results conducted on a given formula. To be used for certification, the cumulative average of all testing must show that the brake friction material contains less than the specified concentrations of the regulated constituents and copper.

(b) If an approved alternative testing method or protocol is used, all testing must be done in accordance with the alternative testing method or protocol.

(5) **How must laboratory testing results be reported to the department?**

(a) All laboratory testing results for a friction material must be transmitted from the testing laboratory directly to an industry-sponsored registrar.

(b) The cumulative average of all testing done on a given brake friction material formulation must be reported to the department, via the industry-sponsored registrar, on behalf of the brake friction material manufacturer.

(c) The cumulative average must show that the concentration of the regulated constituents and copper are less than the specified concentrations.

(6) **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 industry-sponsored registrar or in the testing reported to the department.

(7) **How long must a manufacturer of brake friction material retain copies of laboratory testing results used for certification?** A manufacturer of brake friction materials must maintain copies of laboratory testing results for a period of ten years after the date of certification and must provide copies of these documents to the department upon its request.

(8) **May a manufacturer of brake friction material certify compliance using testing results derived using a method or protocol other than SAE J2975:2011?** A manufacturer of brake friction material may use alternative testing and sampling preparation methods if the alternative is approved by the department in advance of using these testing methods or protocols for certification. The brake friction material manufacturer proposing the alternative shall be responsible for generating data sufficient to demonstrate to the department that the alternative is at least as effective as SAE J2975:2011. Once an alternative testing method or protocol has been approved by the department, any manufacturer of brake friction material may use the approved, alternative method for certification. The department may only approve alternative testing procedures:

(a) When a manufacturer of brake friction material proposes an alternative testing method or protocol;

(b) When the brake friction material manufacturer has provided sufficient evidence to demonstrate that the proposed alternative is at least as effective as SAE J2975:2011; and

(c) When the proposed alternative method or protocol is publicly available.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-080, filed 10/19/12, effective 11/19/12.]

WAC 173-901-090 Marked proof of certification. (1) **What is marked proof of certification?** Marked proof of certification is a certification mark appearing on brake friction material packaging coupled with a unique identification code and environmental compliance marking, described in WAC 173-901-100, on the brake friction material. 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 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 chapter 70.285 RCW and this chapter. When a brake friction material manufacturer marks a brake friction material or its packaging with proof of certification the manufacturer is certifying that:

(a) The brake friction material meets the applicable criteria for the environmental compliance marking, described in WAC 173-901-100, with which it has been marked;

(b) The brake friction material has been registered with an industry-sponsored registrar; and

(c) Self-certification documentation has been submitted to the department.

(2) **When must brake friction material and its packaging be marked?** Brake friction material that is manufactured on or after January 1, 2015, and is sold or offered for sale in Washington state must have marked proof of certification on the brake friction material and its packaging.

(3) **How must brake friction material be marked?** A manufacturer of brake friction material must:

(a) Mark its brake friction material in accordance with SAE J866:2012. This chapter does not require manufacturers to mark the hot and cold coefficients of friction as specified in the SAE J866:2012. Note: These markings are included in the J866 standard because other states have regulations that require brake friction materials to be marked with the hot and cold coefficients of friction.

(b) Ensure the unique identification code reported to the department is the same as the code marked on brake friction material in accordance with SAE J866:2012;

(c) Ensure that the unique identification code is a code that contains the appropriate environmental compliance marking described in WAC 173-901-100. This marking is also described in SAE J866:2012;

(d) Mark its brake friction material with the last two digits of the year the material was manufactured as described in SAE J866:2012; and

(e) Ensure that the marking on the brake friction material is legible.

(4) **May a manufacturer of brake friction material mark a brake friction material with additional information such as batch code information?** Yes. A manufacturer of brake friction material may mark brake friction material with additional information such as batch code information. Batch code information must be marked in accordance with SAE J866:2012.

(5) **How must brake friction material packaging be marked?** Brake friction material packaging must be marked with a certification mark. The certification mark must be registered with the United States Patent and Trademark Office and it must be intended to certify that the brake friction material contained in the package meets the requirements of chapter 70.285 RCW and this chapter. Brake friction material packaging may be marked with a certification mark that is owned by an industry-sponsored registrar.

(6) **Must brakes that do not meet the definition of "brake friction material," such as brakes for motorcycle, be marked?** There is no requirement that these brakes be marked. A brake friction material manufacturer may mark products that are not required to comply with the requirements of the law with "WX" or "X." Manufacturers of brake friction material that is not required to comply with the requirements of the law may certify their product and mark it in accordance with this chapter.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-090, filed 10/19/12, effective 11/19/12.]

WAC 173-901-100 Environmental compliance marking. (1) **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," "N," "WX," or "X" and it allows a person to determine the level of environmental compliance of the brake friction material.

(2) **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:

(a) Asbestiform fibers, 0.1 percent by weight;

(b) Cadmium and its compounds, 0.01 percent by weight;

(c) Chromium (VI)-salts, 0.1 percent by weight;

(d) Lead and its compounds, 0.1 percent by weight; or

(e) Mercury and its compounds, 0.1 percent by weight.

(3) **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 contain any of the compounds listed in subsection (2) of this section in amounts exceeding the specified concentrations and that the brake friction material contains between .5 and 5 percent copper by weight.

(4) **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 (2) of this section in amounts exceeding the specified concentrations and that the brake friction material contains less than .5 percent copper by weight.

(5) **What does the environmental compliance marking "WX" indicate?** A "WX" or "X" indicates that the brake friction material has been granted an exemption from certain requirements of chapter 70.285 RCW and this chapter, under WAC 173-901-140, it is designed for use on a vehicle that is not required to meet the requirements of chapter 70.285 RCW and this chapter, or is manufactured as part of an original equipment service contract. A brake friction material marked with a "WX" or "X" may only be installed on the vehicles or type of vehicles for which it is designed. It must not be installed on a vehicle that is required to comply with chapter 70.285 RCW and this chapter.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-100, filed 10/19/12, effective 11/19/12.]

WAC 173-901-110 Reporting requirements for brake friction material manufacturers. (1) After January 1, 2015, self-certification documentation submitted to the department, under WAC 173-901-060, will fulfill brake friction materials manufacturers' reporting requirements, under RCW 70.285.070.

(2) By January 1, 2013, manufacturers of brake friction material offered for sale in Washington state are required to file an initial baseline report with the department.

(3) For the initial baseline report, due by January 1, 2013, each manufacturer of brake friction material must report the following information to the department, in a form and format prescribed by the department:

(a) Contact information for the brake friction material manufacturer, including the mailing address, phone number, and e-mail address of a representative of the company who can serve as a point of contact for the department;

(b) A table containing the following information:

(i) Each friction material formula manufactured, during 2011, identified by a code assigned by the brake friction material manufacturer. While manufacturers of brake friction material may assign the code, the code must conform to data specifications outlined by the department, including the length of the code, the characters that may be in the code, or other data specifications identified by the department.

(ii) The percent by weight concentrations of copper, nickel, zinc, and antimony in each formula manufactured by the brake friction material manufacturer. These concentrations must be reported using the guidelines in subsection (4) of this section for each formula, whether it is used on light vehicles, heavy/commercial vehicles, or both.

(4) **How will manufacturers of brake friction material determine concentrations of copper, nickel, zinc, and antimony in brake friction materials?**

(a) For the initial report, manufacturers of brake friction material are not required to conduct laboratory tests on brake friction materials to determine the concentrations of copper, nickel, zinc, and antimony. A brake friction material manufacturer may report the concentrations of copper, nickel, zinc, and antimony, by percent by weight:

(i) Using the design intent or formula of brake friction materials; and

(ii) If necessary, consulting with suppliers to determine the concentrations of these elements in raw materials.

(b) Brake friction material manufacturers must report the average concentration based on the amount of the element present in the brake friction material. For example: Only 79.9 percent of the amount of copper oxide (CuO) used in a brake friction material formula would be reported as copper.

(c) Averages, reported to the department, must be rounded to the hundredth of a percent.

(5) **How should brass be calculated into the average reported to the department?** When possible brake friction material manufacturers should calculate the average concentrations of copper, nickel, zinc, and antimony using the actual amounts of these elements in the brass they are using. If this information cannot be obtained, the brake friction material manufacturer may assume that the brass it is using contains seventy percent copper and thirty percent zinc, by weight.

(6) **How will brake friction material manufacturers transmit the initial report to the department?** Initial baseline reporting must follow a process similar to the certification procedure outlined in WAC 173-901-060. Initial baseline reporting must follow the following process:

(a) **Step 1:** Manufacturers of brake friction material must determine the concentrations of copper, nickel, zinc, and antimony in each brake friction material formulation they manufacture;

(b) **Step 2:** Manufacturers of brake friction material must transmit this information to an industry-sponsored registrar;

(c) **Step 3:** Manufacturers of brake friction material must ensure that the industry-sponsored registrar transmits this information to the department in an electronic form and format prescribed by the department.

(7) **How will new market entrants fulfill the baseline reporting prerequisite for certification?**

(a) Manufacturers of brake friction material offered for sale in Washington state are required to file a baseline report by January 1, 2013.

(b) Brake friction material manufacturers that do not currently offer products for sale in Washington state or that fail to file a report by January 1, 2013, may not certify their brake friction material until they file a baseline report.

(c) Manufacturers of brake friction materials seeking to certify brake friction material manufactured prior to January 1, 2016, must provide the baseline report described in this section.

(d) Manufacturers of brake friction material seeking to certify brake friction materials manufactured on or after Jan-

uary 1, 2016, must provide the same baseline report described in this section except that it shall be for brake friction materials manufactured during 2014 as opposed to 2011.

(e) Manufacturers of brake friction material that did not manufacture brake friction materials sold or offered for sale in Washington state between January 1, 2011, and December 31, 2014, must certify to this fact and the department may waive the baseline reporting prerequisite for certification.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-110, filed 10/19/12, effective 11/19/12.]

WAC 173-901-120 How will the department establish baseline concentration levels for copper, antimony, nickel, and zinc? (1) By July 1, 2013, the department will calculate the mean concentration of copper, antimony, nickel, and zinc in brake friction material from the data submitted by brake friction material manufacturers, under WAC 173-901-110, for light and heavy/commercial vehicles.

(2) The department must also calculate for both light and heavy/commercial vehicles how many formulations have:

(a) Less than .5 percent copper by weight;

(b) Between .5 and 5 percent copper by weight; and

(c) More than 5 percent copper by weight.

(3) The department must also calculate similar information as outlined in subsection (2) of this section for antimony, nickel, and zinc. However, the specific ranges will not be determined until after the data has been reported.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-120, filed 10/19/12, effective 11/19/12.]

WAC 173-901-130 Applying for an exemption. (1) **Applicability.** Manufacturers of brake friction material or motor vehicles may apply to the department for an exemption from the requirements of this chapter. Exemptions are limited to:

(a) Small volume vehicle manufacturers;

(b) Specific motor vehicle models; or

(c) Special classes of vehicles, such as fire trucks, police cars, and heavy or wide-load equipment hauling vehicles.

(2) **Criteria for receiving an exemption.** To receive an exemption the manufacturer must demonstrate that complying with the requirements of chapter 70.285 RCW and this chapter:

(a) Is not feasible;

(b) Does not allow compliance with safety standards; or

(c) Causes significant financial hardship.

(3) **Application contents.** The application must include:

(a) The contact information, including the name, phone, e-mail, and mailing address, for a representative of the manufacturer seeking the exemption who can answer questions about the application;

(b) A detailed description of:

(i) The specific motor vehicle model or the class of motor vehicle for which the brake friction material is designed;

(ii) The special needs or characteristics of the vehicle(s) that require the use of noncompliant brake friction material;

(iii) Brake friction material for which the exemption is sought including the concentration of the regulated constituent(s) and copper in the brake friction material for which the applicant is seeking an exemption; and

(iv) The purpose of the regulated constituent(s) and copper in the brake friction material.

(c) An estimate of the number of vehicles in Washington state that would be able to use the exempted brake friction material and a description of the method used to derive this estimate;

(d) A statement that complying with the requirements of this chapter is not feasible, does not allow compliance with safety standards, or causes significant financial hardship;

(e) Detailed documentation that reasonably demonstrates that the statement in subsection (3)(d) of this section is true and correct. Documentation must at a minimum include:

(i) A list of all known brake friction materials that meet the requirements of chapter 70.285 RCW and this chapter;

(ii) An analysis of why these brake friction materials are not viable options for the specific vehicle model, class of vehicle, or small volume vehicle manufacturer for which the exemption is sought; and

(iii) If the applicant is seeking an exemption on the grounds that complying with the requirements of this chapter would cause a significant financial hardship, the applicant must submit financial documents demonstrating this to be the case.

(f) A description of the efforts the manufacturer has undertaken to reach compliance with chapter 70.285 RCW prior to seeking an exemption; and

(g) The signature of an authorized representative of the manufacturer and an accompanying dated statement that declares under penalty of perjury according to the laws of the state of Washington that the information contained in the application is accurate.

(4) Applicants must submit an electronic copy of the application to the department.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-130, filed 10/19/12, effective 11/19/12.]

WAC 173-901-140 Process for reviewing an exemption application. (1) Upon receipt of an exemption application the department will review the application to determine if the application is complete. To be complete an application must include each item in WAC 173-901-130(3).

(2) The department will notify the applicant, within thirty days of the receipt of the application:

(a) That the application has been received and is complete; or

(b) That the application is incomplete and identify which sections are missing or incomplete. If the application is incomplete, the applicant must then complete the application and resubmit it.

(3) After receiving a complete application, the department will review the application. The department will, within ninety days of mailing the notice that the completed application has been received, either:

(a) Determine that the applicant **has demonstrated** that complying with the requirements of this chapter is not feasible, does not allow compliance with safety standards, or causes significant financial hardship and grant the exemption;

(b) Determine that the applicant **has been unable to demonstrate** that complying with the requirements of this chapter is not feasible, does not allow compliance with safety

standards, or causes significant financial hardship and deny the application for exemption; or

(c) Determine that the applicant **has not provided enough information to demonstrate** that complying with the requirements of this chapter is not feasible, does not allow compliance with safety standards, or causes significant financial hardship and request additional information.

(4) If the department requests additional information from the applicant the applicant must:

(a) Notify the department that it has received the request for additional information;

(b) Inform the department that it intends to provide the requested additional information; and

(c) Specify a reasonable time frame, not more than one hundred eighty days, within which the applicant will provide the requested information.

(5) After the department has received the additional information the department will review the application and may make any of the determinations listed under subsection (3) of this section.

(6) For the purposes of this section the term "not feasible" means not capable of being done or carried out. The department shall only grant this exemption in instances where the manufacturer has demonstrated that it is impossible or unreasonably impracticable to comply with the requirements of the chapter, as opposed to in instances of minor obstacles and mere difficulty.

(7) **Renewal of exemptions:** If the department grants an application for an exemption, the exemption will be valid for a three-year term. No sooner than ninety days prior to the end of the three-year term, the applicant may provide written notice, that the exemption is still needed. Upon sending this notice the exemption will renew automatically, for an additional three-year term.

(8) **Expiration of exemptions:** If the department has reason to believe that an exemption may no longer be needed, the department may notify the manufacturer that in order to receive the next renewal it will need to update its application and demonstrate that the exemption is still needed. The department must provide this notice at least one year prior to the next renewal date. If the manufacturer fails to update its application or the department, after reviewing the updated application, determines that the exemption is no longer needed, the exemption will expire.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-140, filed 10/19/12, effective 11/19/12.]

WAC 173-901-150 Brake friction material manufactured as part of an original equipment service contract (OESC). (1) Brake friction materials manufactured as part of an original equipment service contract (OESC) are not required to comply with either of the following:

(a) RCW 70.285.030(1) and WAC 173-901-050(1), for brake friction materials designed for use on vehicles manufactured prior to January 1, 2015; or

(b) RCW 70.285.030(2) and WAC 173-901-050(2), for brake friction materials, designed for use on vehicles manufactured prior to January 1, 2021.

(2) Brake friction materials manufactured as part of an OESC are still subject to all other requirements of chapter 70.285 RCW and this chapter including, but not limited to, certification of compliance, marked proof of certification, and reporting requirements.

(3) A vehicle manufacturer must have a system in place to ensure that brake friction material manufactured as part of an OESC is only installed on the vehicles for which it is designed.

(4) **How does a manufacturer of brake friction material manufactured as part of an OESC certify compliance with the requirements of chapter 70.285 RCW and this chapter?**

(a) If a brake friction material manufactured as part of an OESC does not contain any of the regulated constituents or copper in amounts exceeding the specified concentrations, the manufacturer of the brake friction material should certify using the normal procedure outlined in WAC 173-901-060.

(b) If the brake friction material contains more than the specified concentrations, the manufacturer of the brake friction material must follow the same procedure outlined in WAC 173-901-060 except that:

(i) For brake friction materials manufactured as part of an OESC for vehicles manufactured prior to January 1, 2015, manufacturers of brake friction material will not be required to submit testing results for the regulated constituents. For brake friction materials manufactured as part of an OESC for vehicles manufactured from January 1, 2015, through December 31, 2020, manufacturers of brake friction material will be required to submit testing results for the regulated constituents. To fulfill the reporting requirements under RCW 70.285.070 and WAC 173-901-110, manufacturers of brake friction materials manufactured as part of an OESC for vehicles of any date of manufacture must meet the initial baseline reporting requirements for concentrations of antimony, copper, nickel, and zinc and their compounds as required by WAC 173-901-110 (3) through (7), and after submitting the initial baseline report, must submit testing results to an industry-sponsored registrar and to the department for copper, nickel, zinc, and antimony.

(ii) Brake friction manufacturers must ensure that the unique identification code reported to the department and marked on brake friction materials manufactured as part of an original equipment service contract ends in a "WX" or "X"; and

(iii) Brake friction manufacturers must include in the self-certification documentation, submitted to the department and an industry-sponsored registrar, a description of the vehicle model and its year of manufacture for which the brake friction material is manufactured.

(5) **May brake friction material manufactured as part of an OESC be installed on a vehicle other than the one it is designed for?** Brake friction material manufactured as part of an OESC must not be sold or offered for sale for use on a vehicle other than the vehicle model and model year described in the self-certification documentation.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-150, filed 10/19/12, effective 11/19/12.]

WAC 173-901-160 Responsibilities of wholesalers, distributors, installers, and retailers of brake friction materials. (1) **May I sell brake friction material that I have in stock before the effective dates of chapter 70.285**

RCW? Yes. Brake friction material manufactured before the effective dates may still be sold for a period of time:

(a) Brake friction material that was manufactured before January 1, 2015, may be sold until January 1, 2025, regardless of its content or whether it has been marked with proof of certification;

(b) Brake friction material that was manufactured before January 1, 2021, and contains more than five percent copper by weight may be sold until January 1, 2031; and

(c) Brake friction materials manufactured as part of an original equipment service contract that have been certified and marked may be sold indefinitely after the various effective dates regardless of the amount of the copper or regulated constitutes in the product.

(2) **How will I know that the brake friction material I sell is compliant?** Brake friction material and its packaging are required to be marked with a certification mark and unique identification code indicating that the brake friction material complies with this chapter. Please refer to WAC 173-901-090, 173-901-100, and SAE J866:2012 for details on the markings. The following table describes which brake friction materials are acceptable for sale and when. Each of the following markings will be the last three digits on the unique code marked on brake friction material:

Brake friction material marked with:	May be sold until:
"N" followed by the last two digits of the year of manufacture.	Brake friction material marked with an "N" meets all of the requirements of this chapter and there are no restrictions on its sale.
"B" followed by the last two digits of the year of manufacture.	Brake friction material marked with a "B" meets all of the requirements of this chapter and there are currently no restrictions on its sale. However, future restriction may be put in place.
"A" followed by the last two digits of the year of manufacture when the year of manufacture is 2012 through 2020.	Brake friction material marked with an "A" that has a manufacture year of 2012 through 2020 may be sold until 2031.
"A" followed by the last two digits of the year of manufacture when the year of manufacture is 2021 or later.	Brake friction materials marked with an "A" that has a manufacture year of 2021 or later, may not be sold or offered for sale in Washington state.
"WX" or "X" with or without the year of manufacture.	Brake friction materials marked with a "WX" or "X" are designed for use on exempted vehicles or are otherwise exempted from the requirements of this chapter. It is a violation of this chapter to install these friction materials on non exempt vehicles or in a manner otherwise prohibited by this chapter.
Brake friction material that is not marked with an environmental compliance marking or the year of manufacture.	Unmarked brake friction material manufactured prior to 2015 may be sold for use on any vehicle until 2025. It is a violation of this chapter to sell unmarked brake friction material that is manufactured after 2015 for use on a vehicle that is required to comply with this chapter. Brakes intended for use on certain vehicles, such as motorcycles, are not required to be marked and may be installed regardless of the manufacture date.

(3) **What will happen if I sell a pad that is in violation of this chapter?** For a complete description of the enforcement provisions please see WAC 173-901-180. However, if a wholesaler, distributor, installer, or retailer is found to be violating this chapter, the department must issue a warning letter and provide information and assistance to help this person achieve compliance. If they continue to sell brake friction material in violation of this chapter after receiving a warning and assistance, the department may issue penalties.

(4) **Is it a violation of this chapter to sell a brake friction material that has been marked in accordance with this chapter, yet is found to contain one of the regulated constituents or copper in amounts exceeding the specified concentrations?**

(a) A wholesaler, distributor, installer, or retailer that sells or offers for sale brake friction material that has been marked with proof of certification will not be in violation of this chapter, even if the brake friction material contains the regulated constituents or copper in amounts exceeding the specified concentrations.

(b) However, if the wholesaler, distributor, installer, or retailer knew that the brake friction material contained any of the regulated constituents or copper in amounts exceeding the specified concentrations and knew that the brake friction material was labeled incorrectly, yet sold it or offered it for sale in Washington state, they would be in violation of chapter 70.285 RCW and this chapter.

(5) **What should I do if I am sold brake friction material that does not comply with the requirements of this chapter?** If you are sold brake friction material that is in violation of this chapter, you may not resell it. Report the violation to the department.

(6) **If I purchase brake friction material from a brake friction material manufacturer and package it in a new box, what must I do before offering my product for sale in Washington state?** You are responsible for ensuring that the brake friction material is registered with an industry-sponsored registrar before reboxing the product.

(a) If the brake friction material has already been registered, you do not need to reregister or retest the brake friction material and are not responsible for the accuracy of the information submitted to the registrar and the department. You must package the brake friction material in a package that is marked in accordance with WAC 173-901-090.

(b) If the brake friction material has not been registered, you may not offer the product for sale in Washington state unless you register the product with an industry-sponsored registrar and mark the brake friction material and its packaging in accordance with WAC 173-901-090.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-160, filed 10/19/12, effective 11/19/12.]

WAC 173-901-170 Responsibilities of vehicle manufacturers, vehicle dealers, and other people selling motor vehicles. (1) **Vehicle manufacturer responsibilities:** Manufacturers of new motor vehicles offered for sale in Washington state must ensure that new motor vehicles are equipped with brake friction material certified to be compliant with the requirements of this chapter.

(2) **Do vehicle dealers or other people selling motor vehicles have a responsibility to ensure that the cars they sell are equipped with compliant brake friction material?**

(a) Vehicle dealers or other people selling motor vehicles do not have a responsibility to ensure that the cars they sell are equipped with compliant brake friction material.

(b) However, if a vehicle dealer or another person who is selling a motor vehicle replaces the brake friction material of a new or used vehicle, prior to resale, the seller must replace the brake friction material with a brake friction material that complies with the requirements of this chapter.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-170, filed 10/19/12, effective 11/19/12.]

WAC 173-901-180 Enforcement—Violations—Penalties. (1) The department will enforce this chapter. The department may:

(a) Periodically purchase and test brake friction material sold or offered for sale in Washington state to verify that the material complies with this chapter.

(b) Verify that brake friction material manufacturers have submitted accurate self-certification documentation to the department by requiring brake friction manufacturers to submit complete copies of laboratory testing results and/or samples of brake friction material formulations for which self-certification documentation has been submitted. A brake friction material manufacturer that is required to submit verifying testing results or samples of brake friction material must provide these within seven days of receiving a written notice from the department. The department may not require a manufacturer of brake friction material to verify compliance by submitting samples of brake friction material more than once every three years unless the brake friction material manufacturer has been issued a penalty or required to recall a product under this chapter.

(2) Enforcement of this chapter by the department will rely on notification and information exchange between the department and manufacturers, distributors, retailers, installers, and an industry-sponsored registrar.

(a) After issuing a penalty to or requiring a recall from a manufacturer, the department will notify the industry-sponsored registrar of the violation and inform the registrar if any brake friction materials with a registered unique identification code are not in compliance with the requirements of chapter 70.285 RCW or this chapter.

(b) The department will also post a notice of the penalty or recall on its web site.

(3) The department will issue one warning letter by certified mail to a manufacturer, distributor, installer, or retailer that sells or offers to sell brake friction material in violation of this chapter, and offer information or other appropriate assistance regarding compliance with this chapter. Once a warning letter has been issued to a distributor or retailer for violations under subsections (4) and (5) of this section, the department need not provide warning letters for subsequent violations by that distributor or retailer. For the purposes of subsection (5) of this section, a warning letter serves as notice of the violation. If compliance is not achieved, the department may assess penalties under this section.

(4) A brake friction material distributor or retailer that violates this chapter is subject to a civil penalty not to exceed ten thousand dollars for each violation. Brake friction material distributors or retailers that sell brake friction material that is packaged consistent with RCW 70.285.080 (2)(b) and this chapter are not in violation of this chapter. However, if the department conclusively proves that the brake friction material distributor or retailer was aware that the brake friction material being sold violates RCW 70.285.030 or 70.285.050 or this chapter, the brake friction material distributor or retailer may be subject to civil penalties according to this section.

(5) A brake friction material manufacturer that knowingly violates this chapter shall recall the brake friction material and reimburse the brake friction distributor, installer, retailer, or any other purchaser for the material and any applicable shipping and handling charges for returning the material. A brake friction material manufacturer that violates this chapter is subject to a civil penalty not to exceed ten thousand dollars for each violation.

(6) A motor vehicle distributor or retailer that violates this chapter is subject to a civil penalty not to exceed ten thousand dollars for each violation. A motor vehicle distributor or retailer is not in violation of this chapter for selling a vehicle that was previously sold at retail and that contains brake friction material failing to meet the requirements of this chapter. However, if the department conclusively proves that the motor vehicle distributor or retailer installed brake friction material that violates RCW 70.285.030, 70.285.050, 70.285.080 (2)(b), or this chapter on the vehicle being sold and was aware that the brake friction material violates RCW 70.285.030, 70.285.050, 70.285.080 (2)(b), or this chapter, the motor vehicle distributor or retailer is subject to civil penalties under this section.

(7) A motor vehicle manufacturer that violates this chapter must notify the registered owner of the vehicle within six months of knowledge of the violation and must replace at no cost to the owner the noncompliant brake friction material with brake friction material that complies with this chapter. A motor vehicle manufacturer that fails to provide the required notification to registered owners of the affected vehicles

within six months of knowledge of the violation is subject to a civil penalty not to exceed one hundred thousand dollars. A motor vehicle manufacturer that fails to provide the required notification to registered owners of the affected vehicles after twelve months of knowledge of the violation is subject to a civil penalty not to exceed ten thousand dollars per vehicle. For purposes of this section, "motor vehicle manufacturer" does not include a vehicle dealer defined under RCW 46.70.011 and required to be licensed as a vehicle dealer under chapter 46.70 RCW.

(8) Before the effective date of the prohibitions in RCW 70.285.030 or 70.285.050, the department will prepare and distribute information about the prohibitions to manufacturers, distributors, and retailers to the maximum extent practicable.

(9) All penalties collected under this chapter will be deposited in the state toxics control account created in RCW 70.l05D.070.

[Statutory Authority: Chapter 70.285 RCW. WSR 12-21-082 (Order 10-17), § 173-901-180, filed 10/19/12, effective 11/19/12.]