

COPPER CONTROLS

C.13.c Vehicle Brake Pads

This MRP provision requires Permittees to engage in efforts to reduce the copper discharged from automobile brake pads to service waters via urban runoff. Provision C.13.c.iii requires that the Permittees report annually on legislation development and implementation status, and also in the 2013 Annual Report to assess the status of copper water quality issues associated with automobile brake pads and recommend brake pad-related actions for inclusion in subsequent permits if needed.

Permittee compliance is achieved through continued participation in a process originally initiated by the Brake Pad Partnership (BPP) that achieved the 2010 passage of Senate Bill 346, which will phase out copper and other heavy metals in brake pads over the next 15–20 years (see Table 2)⁵.

Permittees continue to track and support implementation of SB 346 participation in CASQA, which has engaged in the development of regulations for SB 346 by the Department of Toxic Substances Control (DTSC) and also by Washington Department of Ecology for that state's Better Brakes Law, which is similar to SB 346 in many respects⁶.

Key implementation milestones for brake pad regulation were reached in FY 2012-13 with the participation of CASQA and other stakeholders:

- Marking and packaging standards for brake pads (manufactured after 2014) to identify which products contain <0.5% copper,
- A compliance verification system for third party testing of brake pads to certify their percentage content of substances regulated by the laws.
- Identification of two certification organizations to collect baseline reporting information regarding copper, nickel, zinc, and antimony content in brake pads, required from manufacturers by January 2013 under the Washington law.

Washington Ecology also provided CASQA representatives with a preliminary summary of baseline data received from manufacturers by January 2013, which represent only a portion of the total friction materials available for sale in the U.S. in 2011. These initial data generally supported the assumptions used by the BPP concerning the copper content of brake pads in the current population of U.S. automobiles, suggesting agreement with earlier estimates of SB 346's effect on copper loads to California water bodies.

When the full baseline dataset becomes available it may also be used to update load reduction estimates prepared for southern California stormwater programs to show that SB 346 will help them meet the copper load reductions required by TMDLs for local streams. Ongoing CASQA participation in SB 346 implementation and evaluation of progress toward reducing discharges

⁵ Full text of the legislation was submitted with the FY 2010-11 Regional POC Report

⁶ SB 346 includes a requirement that California regulations must be consistent with those of other states concerning compliance markings and certification. Washington's brake pad law required adoption of implementing regulations by December 2012, which was ahead of DTSC's timeline for preparing regulations for SB 346. Washington Department of Ecology adopted final Better Brakes Rules in October 2012; available at <http://www.ecy.wa.gov/programs/hwtr/betterbrakes.html>

of brake-related copper are likely to continue without additional intervention by MRP Permittees during the next MRP permit term.

Table 3. Implementation Timeline for SB 346 Regulation of Vehicle Brake Pads.

Year	SB 346 Key Milestones or Provisions
2011	SB 346 becomes effective January 1. When reformulating brake pads, manufacturers must select alternatives to copper that pose less potential hazard to public health and the environment.
2012	Target date - finalization for certification and marking criteria.
2014	Limits on cadmium, chromium, lead, mercury and asbestos take effect January 1. (Non-compliant pads can be sold solely for inventory depletion until 2024) Compliance certification must be marked on pads and listed on the Internet.
2018	Cal-EPA Secretary appoints extension application advisory committee.
2019	Manufacturers may apply for extensions to the 2025 0.5% copper limit beginning January 1.
2021	5% copper limit takes effect January 1. (No extensions allowed, but non-compliant pads for pre-2021 vehicles may continue to be sold indefinitely)
2023	State Water Board & DTSC report to legislature on brake pad copper reductions and copper TMDL implementation progress. (The report can make recommendations for any additional brake pad copper controls needed to achieve TMDLs)
2025	0.5% copper limit takes effect January 1.
2032	Final end date for all light duty vehicle compliance extensions. (Non-compliant replacement pads for pre-2025 vehicles may continue to be sold indefinitely)