

GG187-14

503.1

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Revise as follows:

503.1 Construction material and waste management plan. Not less than 50 percent of nonhazardous construction waste shall be diverted from disposal, except where other percentages are indicated in Table 302.1. A Construction Material and Waste Management Plan shall be developed and implemented to recycle or salvage construction materials and waste where such salvage and recycling facilities are available within 75 miles of the building site. The Construction Material and Waste Management Plan shall comply with all of the following:

1. The location for collection, separation and storage of recyclable construction waste shall be indicated.
2. Materials to be diverted from disposal by efficient usage, recycling, reuse, manufacturer's reclamation, or salvage for future use, donation or sale shall be specified.
3. The percentage of materials to be diverted shall be specified and shall be calculated by weight or volume, but not both.
4. Receipts or other documentation related to diversion shall be maintained through the course of construction. Where requested by the *code official*, evidence of diversion shall be provided.

For the purposes of this section, construction materials and waste shall include all materials delivered to the site and intended for installation prior to the issuance of the certificate of occupancy, including related packaging. Construction and waste materials shall not include land-clearing debris, excavated soils and fill and base materials such as, but not limited to, topsoil, sand and gravel. Land-clearing debris shall include trees, stumps, rocks, and vegetation. Excavated soil, fill material and land-clearing debris shall be managed in accordance with Section 406.1.

Reason: This proposal was submitted by the ICC Sustainability Energy and High Performance Code Action Committee (SEHPCAC). The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. In 2012 and 2013, the SEHPCAC has held six two-day open meetings and 50 workgroup calls, which included members of the SEHPCAC as well as any interested parties, to discuss and debate proposed changes and public comments. Related documentation and reports are posted on the SEHPCAC website at: <http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx>.

There are rural or remote locations where the cost or impact to the environment for transporting is greater than the benefit. That should not be a barrier to creating a green facility.

Diesel exhaust is a well-known human carcinogen estimated to be responsible for 70 percent of the total cancer risk from air pollution. Notably, the occupational exposure of truck drivers, railroad workers, heavy-equipment operators, and other workers is associated with lung cancer risks 40 percent higher, on average, than in the population at large. In fact, a recent study of the U.S. trucking industry found an excess risk of death due to lung cancer and ischemic heart disease particularly among drivers. Numerous studies have documented a wide range of other adverse health impacts from long-term exposure to fine particulate matter, a major component of diesel exhaust. These include increased risk for cardiovascular disease such as atherosclerosis, increased heart attacks, increased emergency room visits for acute health events, birth defects, low birth weights, premature births, and increased rates of death.¹ A recent California Air Resources Board (CARB) report quantified some of the health impacts caused by diesel exhaust from freight transport in California; it found 2,400 premature deaths, 2,830 hospital admissions, 360,000 missed workdays, and 1,100,000 missed days of school in 2005.²

Burning a gallon of diesel fuel produces 22.38 pounds of CO₂.³ On average Semi-trucks get 6.5 miles per gallon.⁴ A 50 mile trip would require approximately 65 gallons to complete each trip thus producing approximately 1,455 pounds of CO₂. On a new elementary school construction project a total of 115 hauls were required to dispose/divert approximately 450 tons of debris. Having to transport this construction waste to a recycling center over 50 miles from the site would have produced approximately 167,000 pounds of CO₂. Requiring extended distances to recycle construction debris will inversely impact the environment.

Bibliography:

1. Driving on Fumes, Truck Drivers Face Elevated Health Risks from Diesel Pollution, Diane Bailey, and Natural Resources

Defense Council, Zach Goldman, Coalition for Clean and Safe Ports, Maria Minjares, Natural Resources Defense Council; NRDC Issue Paper, December 2007; accessed 21 November 2013 at: <http://www.nrdc.org/health/effects/driving/driving.pdf>

2. California Air Resources Board. "Quantification of the Health Impacts and Economic Valuation of Air Pollution From Ports and Goods Movement in California." Appendix A in Emission Reduction Plan for Ports and Goods Movement (GMERP), March 22, 2006 accessed at: www.arb.ca.gov/planning/gmerp/march21plan/appendix_a.pdf
3. US Department of Energy, The U.S. Energy Information Administration (EIA), Frequently Asked Questions, accessed 22 November 2013 at: <http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11>
4. The National Academies, Technologies and Approaches to Reducing the Fuel Consumption of Medium and Heavy-Duty Vehicles, 2010 accessed 22 November 2013 at: http://cta.ornl.gov/vtmarketreport/pdf/chapter3_heavy_trucks.pdf

Cost Impact: Will not increase the cost of construction. The change should decrease the cost of construction depending on the location.

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