LEED O+M: Existing Buildings | v3 - LEED 2009

Sustainable purchasing - reduced mercury in lamps

MRc4 | Possible 1 point

Intent

To establish and maintain a toxic material source reduction program to reduce the amount of mercury brought onto the building site through purchases of lamps.

Requirements

Develop a lighting purchasing plan that specifies maximum levels of mercury permitted in mercury-containing lamps purchased for the building and associated grounds, including lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. The purchasing plan must specify a target for the overall average of mercury content in lamps of 90 picograms per lumen-hour or less. The plan must include lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. The plan must require that at least 90% of purchased lamps comply with the target (as measured by the number of lamps). Lamps containing no mercury may be counted toward plan compliance only if they have energy efficiency at least as good as their mercury-containing counterparts.

Implement the lighting purchasing plan during the performance period such that all purchased mercury-containing lamps comply with the plan. One point is awarded to projects for which at least 90% of all mercury-containing lamps purchased during the performance period (as measured by the number of lamps) comply with the purchasing plan and meet the following overall target for mercury content of 90 picograms per lumen-hour.

Exception: Screw-based, integral compact fluorescent lamps (CFLs) may be excluded from both the plan and the performance calculation if they comply with the voluntary industry guidelines for maximum mercury content published by the National Electrical Manufacturers Association (NEMA), as described in the LEED Reference Guide for Green Building Operations & Maintenance, 2009 Edition. [Europe ACP: NEMA Equivalent]

Screw-based, integral CFLs that do not comply with the NEMA guidelines [Europe ACP: NEMA Equivalent] must be included in the purchasing plan and the performance calculation.

Performance metrics for lamps — including mercury content (mg/lamp), mean light output (lumens) and rated life (hours) — must be derived according to industry standards, as described in the LEED Reference Guide for Green Building Operations & Maintenance, 2009 Edition. Mercury values generated by toxicity characteristic leaching procedure (TCLP) tests do not provide the required mercury information for LEED 2009 for Existing Buildings: Operations & Maintenance and cannot be used in the calculation.

LEED 2009 for Existing Buildings: Operations & Maintenance addresses only the lamps purchased during the performance period, not the lamps installed in the building. Similarly, LEED 2009 for Existing Buildings: Operations & Maintenance does not require that each purchased lamp comply with the specified mercury limit; only the overall average of purchased lamps must comply.

Mercury-containing lamps (or their high-efficiency counterparts) must be purchased during the performance period to earn points in this credit.

Alternative Compliance Paths (ACPs)

Europe ACP: NEMA Equivalent

Projects in Europe may exclude CFLs if they comply with the criteria listed in Annex III of the Restriction of the Use of Certain Hazardous Substances of the European Union Directive (EU RoHS.)

Screw-based, integral CFLs that do not comply with the NEMA guidelines **(or EU RoHS for projects in Europe)** must be included in the purchasing plan and the performance calculation.

LEED EBOM 2009 reference guide supplement with Europe ACPs

Credit substitution available

You may use the LEED v4 version of this credit on v2009 projects. For more information check out this article.