Setting Standards for Excellence

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NEMA OPPOSITION TO BAN ON MERCURY HEADLAMPS
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Proposed legislation would ban the sale of HID headlamps. This proposal is not economically feasible, will have no effect on environmental mercury levels and will adversely affect highway safety.

Mercury-added headlights are high intensity discharge (HID) lamps. Instead of the glowing filament in a conventional halogen lamp, HID lamps use a more efficient arc to generate light. HID systems consist of the arc lamp itself, a dedicated reflector and lens control system and an electronic control unit called a ballast. The electronic ballast allows the arc lamp to be turned on and off rapidly for high/low beam use and maintains the arc in a steady state.

It is not economically feasible to retrofit an existing HID headlight system

Because mercury-added HID lamps are part of a unique electrical/optical system they cannot be easily retrofitted to halogen headlamp systems and still maintain compliance with Federal Highway Administration requirements. As a result the only way to retrofit an existing HID headlight system with a non-mercury system today is to: (1) remove the entire electrical/optical systems from the front end of the car, and (2) install a different system (housing and all) for conventional halogen headlamps. We project this cost in excess of $1,000. Such a cost is entirely out of proportion with any possible benefit from mercury reduction.

A sales ban will not result in lower environmental levels of mercury.

An HID headlight contains about 0.5 milligrams of mercury (less than 0.00002 ounces). That means you would need to collect 900,000 lamps from 450,000 automobiles to recover one pound of mercury. Since the HID headlamp-ballast systems cost well over $1,000 per car, manufacturers offer them as an option in only a relatively limited number of high-end car models. A sales ban, therefore, would not reduce environmental mercury levels because there is little mercury in the product.

HID headlamps improve driver visibility.

HID headlamps improve driver visibility and increase driver safety. These HID systems deliver this improved visibility while using less energy than their halogen substitutes.

In summary, with the very small amount of mercury in the HID lamps and with their very limited market penetration because of the high expense of the HID lamp ballast system, a sales ban of mercury-added HID headlamps does not provide any meaningful reduction of mercury pollution in the environment. Further the costs of conversion are far out of line with any environmental benefit.