

November 12, 2022

By Email
HowardK@gao.gov

Dear Karen Howard, Director, General Accounting Office,

For the past several years the Soft Lights Foundation has been attempting to have the House Oversight Committee investigate the lack of regulation and detrimental effects of visible radiation from flat surface, directed energy Light Emitting Diodes. We have been completely ignored and have made no inroads with Congress.

However, we have made progress with federal agencies. We have learned that the FDA was directed by Congress in 1968 by the Radiation Control for Health and Safety Act to regulate electromagnetic radiation from electronic products, but that the FDA never published comfort, health, or safety regulations for LEDs. To rectify this situation, the Soft Lights Foundation has petitioned the FDA to regulate LED products, and this petition is under review and taking public comment. (<https://www.regulations.gov/document/FDA-2022-P-1151-0001>). The FDA recently sent us a letter (attached) stating that they need more time.

We have contacted many of the federal agencies, including NHTSA, FAA, OSHA, CPSC, Access Board and others and asked them about regulation of LEDs. All federal agencies that responded to us unequivocally stated that they defer entirely to the FDA for regulation of LEDs. Yet, since the FDA has never published any regulations for LED products, this means that LEDs are entirely unregulated, even though the high intensity, spatially non-uniform energy of LEDs has been shown to be extremely powerful and dangerous.

We have petitioned NHTSA to issue notices of non-compliance to the automakers for failing to petition either the FDA or NHTSA for authorization to use LED products as vehicle headlights and because vehicles with LED headlights are dangerous and do not comply with federal safety regulations, including FMVSS-108.

The CPSC has informed us that they will take no action to regulate LEDs in consumer products such as washing machines, children's shoes, and flashlights because they have deferred to the FDA.

OSHA has similarly informed us that they will take no action to protect workers from LED visible radiation because they are deferring to the FDA for this regulation.

I was recently sent information about your office from one of our members. After reviewing the GAO's website, it is clear that the GAO is the right agency to investigate LEDs and provide a report to Congress so that Congress can provide oversight to the LED issue. Due to the lack of regulation of LED visible radiation, some people are now confined to their homes due to adverse reactions to LED visible radiation, some people have lost their jobs, millions of people are suffering eye pain and eye injury from LED

headlights, and insect populations are being wiped out due to use of high blue content LED streetlights.

Because LEDs emit light from a flat surface, the visible radiation is directed and spatially non-uniform. Peak luminance can be as high as 100,000,000 nits, whereas human comfort level maximum is around 300 nits. The digital nature of LEDs means that LED lights and LED strobe lights such as on emergency vehicles will trigger seizures, migraines, anxiety, nausea, and panic attacks.

The Department of Energy has claimed that the characteristics of LED light are equivalent to characteristics of incandescent light. This is not true. The DOE also claims that they are unaware of any adverse health effects from LED visible radiation. This is also not true. The DOE has published a rule that effectively bans incandescent light bulbs, even though the LED replacement technology is unacceptably toxic, discriminatory, and without FDA regulations. Congress needs to know about this.

I am requesting an audience with the GAO so that we can assist the GAO with the development of a report to Congress that identifies the massive implications related to the deployment of unvetted, unregulated, unapproved LED products.

Sincerely,

Mark Baker
President
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