

August 17, 2024

BY EMAIL

Michael Webb, City Manager Davis, California cmoweb@cityofdavis.org

Re: Notice of Private Enforcement Action – LED Flashing Lights

Dear Michael Webb,

California Vehicle Code ("CVC") Section 25250 states, "Flashing lights are prohibited on vehicles except as otherwise permitted." There is no California statute that authorizes the use of LED flashing lights on vehicles, and thus all LED flashing lights on vehicles are prohibited by CVC Section 25250. Davis is using LED flashing lights on vehicles without legal authorization. Since government authorities have not enforced this code, this letter serves as a private enforcement action under the Americans with Disabilities Act.

The introduction of unregulated Light Emitting Diode ("LED") products has segregated the public into two groups: those individuals without disabilities who are not acutely impacted by LED lights, and those individuals with disabilities who suffer acute adverse reactions to LED lights, including non-epileptic and epileptic seizures, migraines, vomiting, anxiety, panic attacks, impaired vision, reduced cognitive abilities, and suicidal ideations. This segregation by government officials is a violation of the Equal Protection Clause of the 14th Amendment of the U.S. Constitution.

The US Department of Energy states that LEDs are a "radically new technology" that emit a "directional" light with "unique characteristics".¹ It is the directional nature of LEDs and their unique spatial, spectral, and temporal characteristics which cause individuals with disabilities to suffer acute adverse neurological reactions when exposed to LED flashing lights such as on police cars and RRFBs. The US Food and Drug Administration is mandated by 21 U.S.C. 360ii(a) to maintain a radiation control program for LED products to minimize the exposure to, and emissions of, unnecessary LED light. However, the FDA has ignored this mandate, and thus all LED products are entirely unregulated, despite LEDs being a radically new technology with directional light and unique characteristics.

¹ <u>https://www1.eere.energy.gov/buildings/publications/pdfs/ssl/ssl_lessons-learned_2014.pdf</u>

Here is a sampling of reports of neurological, psychological, and physical injury caused by LEDs:

- Minnesota Department of Human Rights LED RRFB (<u>https://www.softlights.org/wp-content/uploads/2023/06/74059-6-15-2023-ECP-Memorandum-.pdf</u>)
- LED RRFB Seizure / Concussion (<u>https://www.softlights.org/wp-content/uploads/2022/09/MA-Incident-Report.pdf</u>).
- Emergency Vehicle Seizure Reaction / Panic Attack -(<u>https://www.softlights.org/wp-content/uploads/2021/09/Encounter-with-Emergency-Vehicle.pdf</u>)
- LED Incident Reports (<u>https://www.softlights.org/led-incident-reports/</u>)
- NYSPSC LED Streetlight Case 21-02623 Public Comments: (https://tinyurl.com/3b9farmy)

Pulsed LED light is particularly dangerous. Below are several examples of LED flashing light videos and their titles:

- 1. My LED Lights (epilepsy/seizure warning): (<u>https://www.youtube.com/shorts/qvtmhHbPeMU</u>)
- 2. LED Strobe Lights Blue **Warning May Cause Seizure**: (<u>https://youtu.be/K_oIWfOMKeI</u>)
- 3. How to Have a Seizure 101 (Warning Flashing Lights)

(https://www.youtube.com/shorts/1fGBrt2D9s4)

4. Edmonds, WA RRFB installation: (<u>https://youtu.be/bdabrTTnf3w</u>)

5. 2015 Dodge Charger Police Car LED Police Lights outfitted by HG2 Emergency Lighting: (<u>https://youtu.be/KJ_1CiNVtTo</u>)

6. LVT Manual Strobe and Flood Light: (<u>https://youtu.be/FVoqCqBi5wY</u>)

Seizure reactions are primarily a function of radiance, flash rate, and cycle depth. The higher the radiance, the more risk. The faster the rate, the more risk. The closer to digital pulsing, the more risk. All three factors play a role. A very high radiance LED can cause a seizure with zero flashing. A low radiance light can cause a seizure if the rate is high. A digital on/off has a higher risk of seizure than sine wave. As can be seen in the videos, the first three videos are marked with seizure warnings, whereas the other LED flashing lights are in public places, are unavoidable, are triggering seizures, but are not marked with seizure warnings.

Many municipalities believe that the Americans with Disabilities Act allows for a municipality to provide a reasonable accommodation when notified of a discriminatory barrier. However, this understanding is not correct when the issue involves alterations to municipality infrastructure. 28 C.F.R. § 35.151(b)(1) states:

Each facility or part of a facility altered by, on behalf of, or for the use of a public entity in a manner that affects or could affect the usability of the facility or part of the facility shall, to the maximum extent feasible, be altered in such manner that the altered portion of the facility is readily accessible to and usable by individuals with disabilities, if the alteration was commenced after January 26, 1992. Since LED flashing lights were installed by the city after 1992, there is an absolute requirement that this alteration not create a new discriminatory barrier where none existed previously. There is no allowance for reasonable accommodation in this situation. The switch to LED light was a major alteration that required extensive analysis to ensure that the radically new LED technology did not create a path-of-travel barrier for individuals with disabilities and to ensure that the altered area was still readily accessible and usable by individuals with disabilities. Due to the failure of the FDA to comply with 21 U.S.C. 360ii(a), and the decision by the city to implement LED technology without ensuring its safety, the LED products that have been installed now need to be removed.

On August 14, 2024, in the case Baker v. Petrovich involving LEDs creating a discriminatory barrier, the Court ruled that the case can continue, stating, "Petrovich's demurrer to the first cause of action [The Americans with Disabilities Act] in plaintiff's complaint is OVERRULED. (Code Civ. Proc., § 430.010, subd. (e).) **The Court finds that plaintiff has alleged facts sufficient to state this cause of action**. (42 USC 12181, subd. (7)(E); 28 CFR 36.101, 36.402; Martinez v. San Diego County Credit Union (2020) 50 Cal.App.5th 1048, 1060; see Serrano v. Priest (1971) 5 Cal.3d 584, 591; Compl., ¶¶ 2, 12, 15, 16, 30 – 33, 35 – 37.)"² (emphasis added). While this ruling is not the result of a trial and is not an appellate level ruling, this ruling nonetheless shows that company and government officials may not install unregulated, dangerous technology and simply let individuals with disabilities suffer the consequences.

The Equal Protection Clause of the 14th Amendment of the U.S. Constitution states:

All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the state wherein they reside. No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.³

LED products divide the public into two groups: those individuals with disabilities who need regulatory protection from the city, and those individuals without disabilities who do not need regulatory protection. If the city is to allow the use of LED products, then the city is Constitutionally required to adopt policies and procedures for those LED products which ensure the equal protection of individuals with disabilities.

California Government Code Section 835 states:

Except as provided by statute, a public entity is liable for injury caused by a dangerous condition of its property if the plaintiff establishes that the property was in a dangerous condition at the time of the injury, that the injury was proximately caused by the

² https://www.yolo.courts.ca.gov/sites/default/files/yolo/default/2024-08/ATO-TEN-240815.pdf

³ <u>https://www.law.cornell.edu/wex/equal_protection</u>

dangerous condition, that the dangerous condition created a reasonably forseeable risk of the kind of injury which was incurred, and that either:

(a) A negligent or wrongful act or omission of an employee of the public entity within the scope of his employment created the dangerous condition; or

(b) The public entity had actual or constructive notice of the dangerous condition under Section 835.2 a sufficient time prior to the injury to have taken measures to protect against the dangerous condition.

Since LED products can create dangerous conditions for individuals with disabilities, the city is required to eliminate those dangerous conditions, or it can be held liable for any injuries caused by the use of the LED products.

LED flashing lights are prohibited by CVC 25250 and 28 CFR 35.151(b)(1) because LED flashing lights on vehicles have not been authorized by the California Legislature, because LED flashing lights create a barrier to path-of-travel for individuals with disabilities, and because LED flashing lights cause acute adverse neurological reactions for individuals with disabilities. This letter is a good-faith effort to allow Davis to correct the LED flashing light violations by turning off and/or removing LED flashing lights on city vehicles without being subjected to litigation. However, failure to turn off and/or remove LED flashing lights from city vehicles may result in a discrimination lawsuit.

Sincerely,

/s/ Mark Baker President Soft Lights Foundation <u>mbaker@softlights.org</u>