

SB 34: OUTDOOR LIGHT REQUIREMENTS & EXEMPTIONS A proposal to amend the New Mexico Night Sky Protection Act Contact: Jon Holtzman, Chair State Council, holtzmanjon@gmail.com Peter Lipscomb, Vice-chair State Council, psipscomb@gmail.com

FREQUENTLY ASKED QUESTIONS:

 We already have the Night Sky Protection Act that requires shielding. Why do we need a revision?

Artificial light at night below horizontal can still cause glare and light trespass, not addressed in the 1999 law. Glare interferes with human safety and night vision, light trespass is a nuisance. SB34 restricts light to be predominantly directed within 80 degrees of straight down (nadir) instead of 90. This requirement is what has been recommended by the internationally recognized DarkSky International, who have worked with lighting industry experts to develop it.

Furthermore, the original NSPA allowed for unshielded lighting for low wattage lights, but since the technology has changed to LEDs, low wattage now can still be very bright! Lumens is the appropriate unit to specify brightness, so SB34 incorporates that and is more specific about what is allowed.

Finally, it is now recognized that responsible lighting can be as safe as lighting that allows light up into the sky where it is not needed, so SB34 proposes to remove exemptions that were previously included because of safety concerns.

- Will anyone be required to change existing lighting at any time?
 - No. Only new lighting is subject to the revised NSPA. We hope that people will choose to replace existing lighting because it makes sense to do so from the perspective of cost and better lighting, but SB34 does not require it.
- If existing lighting is not required to change, how are we improving anything?
 - All new lighting is required to be shielded, so SB34 keeps the situation from getting worse. Light pollution has been increasing in New Mexico, and we need to stop the bleeding!
- How will the NSPA be enforced?

The enforcement mechanism is unchanged: the construction industries division of the regulation and licensing department shall enforce the Night Sky Protection Act as it pertains to public buildings subject to permit and inspection under the Construction Industries Licensing Act and each political subdivision of the state shall fully enforce the provisions of the Responsible Outdoor Lighting and Night Sky Protection Act.

Enforcement is undoubtedly a challenging problem, and one we need to continue to work on through education about the issue. Having legislation on the books is critical in the endeavor, both to be able to point to a legal requirement, and also to demonstrate the commitment that our state has to preserving a resource that is important to us culturally and economically,

among other things.

 Why does SB34 remove the exemption for worker safety at farms, ranches, dairies, feedlots or industrial, mining or oil and gas facilities?

First, note that the exemption for existing lighting stands; no modifications to existing lighting or hours of operation for these facilities are required.

DarkSky International and the Illuminating Engineering Society have established standards for worker safety that can be achieved using responsible lighting, as implemented in the revised NSPA. Responsible lighting can focus on safety and can be safer than non-compliant lighting. Some sites, e.g., some oil and gas facilities in Texas and SE New Mexico, have installed responsible lighting and report that worker satisfaction is higher in that they feel safer.

The largest growth of light pollution in New Mexico has occurred in the NW and SE portions of the state as a result of wasteful lighting at oil and gas facilities. Moving forward, the increase in light pollution can and should be stopped; removing the exemption only means that new lighting needs to be compliant. Note that facilities on BLM land are already required to install shielded lighting.

For new lighting, the start date of the new shielding requirement is January 1, 2027 so that any facilities currently in planning or construction do not need to be changed.

What about lighting at recreational facilities?

As above, existing lighting is grandfathered in, and no modifications are required.

For new facilities, DarkSky International has a program that demonstrates that compliant lighting at recreational facilities is feasible at comparable cost.

Why does SB34 remove the exemption for highway advertising?

Highway advertising signs can contribute significantly to light pollution especially in some of the more rural areas in the state. Many advertising signs are lit from below, which can lead to increased light pollution. These signs can be equally well lit from above with shielded lighting, so it is possible to both have highway advertising and protect our skies at the same time!

SB34 maintains an exemption for electronic digital billboards which currently probably cannot meet the shielding requirement. The operation of these is regulated at some level by existing state code.