

**State of California
Office of Administrative Law**

In re:
California Highway Patrol

Regulatory Action:

Title 13, California Code of Regulations

Adopt sections: 1029.1, 1029.2, 1029.3,
1029.4

Amend sections:

Repeal sections:

**NOTICE OF APPROVAL OF REGULATORY
ACTION**

Government Code Section 11349.3


OAL Matter Number: 2021-0304-02

OAL Matter Type: Regular (S)

This action adopts criteria for the performance and use of a Hi-Lo audible warning sound on emergency vehicles pursuant to Vehicle Code 27002.

OAL approves this regulatory action pursuant to section 11349.3 of the Government Code. This regulatory action becomes effective on 6/24/2021.

Date: June 24, 2021



Mark Storm
Senior Attorney

For: Kenneth J. Pogue
Director

Original: Amanda L. Ray, Commissioner
Copy: Kasonja Pochop

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

ADOPTED TEXT

TITLE 13, CALIFORNIA CODE OF REGULATIONS, DIVISION 2, CHAPTER 4,
ADD ARTICLE 8.5, SECTIONS 1029.1, 1029.2, 1029.3, AND 1029.4.

**HI-LO AUDIBLE WARNING SOUND
(CHP-R-2020-06207)**

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Additions.....Times New Roman 12-point font with single underline.
Deletions.....~~Times New Roman 12-point font with strikethrough.~~
Modified Additions.....Times New Roman 12-point font with double underline.
Modified Deletions.....~~Times New Roman 12-point font with double strikethrough.~~

§ 1029.1. Hi-Lo Audible Warning Sound Definitions.

- (a) A “Hi-Lo Audible Warning Sound” is an electronic device or sound, meeting the requirements of this article, which produces a distinctive and recognizable Hi-Lo Audible Warning Sound, as referenced in Vehicle Code Section 27002(b), which alternates between a fixed high and a fixed low frequency intended to be identified with emergency evacuations.
- (b) A “siren,” as defined in Article 8, Section 1021, is not a “Hi-Lo Audible Warning Sound” or a “Hi-Lo sound.”

Note: Authority cited: Section ~~26103~~ 27002, Vehicle Code. Reference: Sections ~~26103,~~
~~26104,~~ and 27002, Vehicle Code.

§ 1029.2. Hi-Lo Audible Warning Sound Requirements.

(a) Audible Warning Sound Functions. To be considered compliant with this article, the Hi-Lo Audible Warning Sound shall meet the following requirements:

- (1) The activation switch shall be clearly marked as “Hi-Lo” on a control panel.
- (2) The sound shall be a continuous, unbroken, repetitive, two-tone electronic sound from time of activation until deactivation.
- (3) The sound shall not be a siren, air horn, buzzer, or shrill-type sound.
- (4) The sound shall not be capable of functioning simultaneously, or in conjunction with a siren, if so equipped.

(b) Sound Level Output. To be considered compliant with this article, the Hi-Lo Audible Warning Sound shall meet the following requirements:

(1) The sound shall perform at a minimum decibel (dB) range of 100 dB to a maximum of 130 dB as measured at zero degrees, 10 feet in front of the speaker.

(c) Sound Duration. To be considered compliant with this article, the Hi-Lo Audible Warning Sound shall meet the following requirements:

(1) Sound duration type ~~is required to~~ shall meet one of the following three Hertz (Hz) cycling frequency ratings:

(A) Between 659 Hz cycles per second for the Hi tone and 554 Hz cycles per second for the Lo tone (“European Hi-Lo”) or;

(B) Between 932 Hz cycles per second for the Hi tone and 740 Hz cycles per second for the Lo tone (“USA Hi-Lo”) or;

(C) Between 1244 Hz cycles per second for the Hi tone and 1046 Hz cycles per second for the Lo tone (“California Hi-Lo”).

(2) The operational mode of the alternating Hi-Lo tones shall be active between a nominal minimum cycling rate of 35 cycles per minute to a maximum of 80 cycles per minute with no break or pause between tone switching.

(d) Only one of the three required sound duration types shall be used as a Hi-Lo Audible Warning Sound.

Note: Authority cited: Sections ~~26103~~ 27002, Vehicle Code. Reference: Section ~~26103 and 26104~~27002, Vehicle Code.

§ 1029.3. Hi-Lo Audible Warning Sound Conformance, Testing, Maintenance, and Use Training.

(a) ~~An~~ Hi-Lo Audible Warning Sound authorized users ~~should~~ shall retain documentation showing the Hi-Lo Audible Warning Sound is in conformance with section 1029.2 of this article for the service life of the device.

(1) A Hi-Lo Audible Warning Sound ~~should~~ shall be installed, tested and maintained using procedures provided by the original manufacturer of the Hi-Lo Audible Warning Sound.

(2) Sound testing, maintenance, and use training ~~should~~ shall be conducted in a location where an unintentional response to the Hi-Lo Audible Warning Sound by the public would not occur.

Note: Authority cited: Sections ~~26103~~ 27002, Vehicle Code. Reference: Section ~~26103 and 26104~~27002, Vehicle Code.

§ 1029.4. Hi-Lo Audible Warning Sound Public Education and Authorized User Training.

- (a) A# Hi-Lo Audible Warning Sound authorized user shall provide information to educate the public regarding the sound of the Hi-Lo Audible Warning Sound and its use as a notification for the need of an immediate evacuation, using the following means:
- (1) Public education events.
 - (2) Public notices on Web sites of authorized users.
 - (3) Public notices to regional media outlets.
- (b) A# Hi-Lo Audible Warning Sound authorized user shall train personnel in the proper use of the Hi-Lo Audible Warning Sound and the importance of warning against the indiscriminate use of the device, so as to prevent the reduction of the effectiveness of the uniquely identifiable sound when used to warn the public.

Note: Authority cited: Sections ~~26103~~ 27002, Vehicle Code. Reference: Section ~~26103 and 26104~~ 27002, Vehicle Code.