

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

INITIAL STATEMENT OF REASONS

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)

PURPOSE AND NECESSITY OF REGULATIONS

On September 29, 2020, Governor Gavin Newsom signed into law Senate Bill 909 (Dodd, Chapter 262, Statutes of 2020). Senate Bill 909 is a senate transportation bill which amends the existing practice of allowing the use of a Hi-Lo Audible Warning Sound only through a permit issued by the California Highway Patrol (CHP). Senate Bill 909 expressly permits an authorized emergency vehicle to be equipped with a Hi-Lo Audible Warning Sound for the purpose of warning individuals of an immediate evacuation in the case of an emergency. The amendment requires the CHP to provide regulation to determine the standardization of such a Hi-Lo Audible Warning Sound used across the state.

Section 2402 of the California Vehicle Code (CVC) authorizes the Commissioner of the CHP to make and enforce regulations as necessary to carry out the duties of the CHP. Section 26103 CVC authorizes the Department to adopt regulations establishing standards and specifications of vehicle equipment, including, but not limited to, sirens. Section 27002 CVC, by regulation, permits the use of a Hi-Lo Audible Warning Sound, meeting the requirements established by the Department, on authorized emergency vehicles.

The CHP proposes to adopt Title 13, California Code of Regulations (CCR), Sections 1029.1, 1029.2, 1029.3, and 1029.4, in order to fulfill statutory requirements contained in Section 27002 CVC. This proposed rulemaking adopts criteria which defines and establishes performance requirements and applicability for the use of a Hi-Lo Audible Warning Sound on authorized emergency vehicles. This action will consider the competitiveness of California businesses by eliminating or modifying, to the extent possible, regulations which impose a negative impact on businesses and the economy.

SECTION BY SECTION OVERVIEW

The proposed addition to Title 13, CCR, Division 2, Chapter 4, of Article 8.5, Sections 1029.1, 1029.2, 1029.3, and 1029.4, was made for consistency pursuant to Section 27002 CVC.

Section 1029.1. Hi-Lo Audible Warning Sound Definitions

This section is added to define the requirements for use of a “Hi-Lo Audible Warning Sound” in authorized emergency vehicles, pursuant to Section 27002 CVC. A Hi-Lo Audible Warning Sound is devised to be different from a “siren” by producing a distinctive Hi-Lo Audible Warning Sound, which may be used to notify the public of an immediate evacuation in the case of an emergency. The term Hi-Lo Audible Warning Sound includes both the sound-producing device itself and/or the specific installed sound.

Subsection (a) is added to define a Hi-Lo Audible Warning Sound for the purpose of ensuring consistency in the applicability of regulations and clarifying its intended use for emergency evacuations.

Subsection (b) is added to distinguish that a Hi-Lo Audible Warning Sound is not a siren, as defined in Title 13, CCR, Article 8, Section 1021. This further establishes that a Hi-Lo Audible Warning Sound and siren are fundamentally different by definition, as well as functionality.

Section 1029.2. Hi-Lo Audible Warning Sound Requirements

This section is added to Title 13, CCR, Division 2, Chapter 4, Article 8.5, to establish Hi-Lo Audible Warning Sound requirements, pursuant to Section 27002 CVC. This section establishes requirements for Hi-Lo Audible Warning Sound functions, sound-level output, and sound duration. Only a Hi-Lo Audible Warning Sound meeting the parameters set forth in this section meets the requirements established by the Department.

Subsection (a) is added to establish parameters for Hi-Lo Audible Warning Sound functions, as well as placement of the activation switch.

Subsection (a)(1) is added to specify the placement and marking of the Hi-Lo Audible Warning Sound activation switch. This is necessary as a safety measure to prevent accidental or inadvertent activation, as well as to ensure the switch is easily located in the event an emergency evacuation is necessary.

Subsection (a)(2) is added to require the Hi-Lo Audible Warning Sound to be a continuous two-tone electronic sound to distinguish it from a siren. This is necessary to provide the public a recognizable and consistent sound identified with emergency evacuations.

Subsection (a)(3) is added to assist the public in differentiating the Hi-Lo Audible Warning Sound from a siren, air horn, buzzer, or shrill-type sound. This is necessary to ensure the Hi-Lo Audible Warning Sound is easily distinguishable and preserves the impact of the intended use of the Hi-Lo Audible Warning Sound.

Subsection (a)(4) is added to preclude the use of a siren when the Hi-Lo Audible Warning Sound is activated. This is necessary to establish that the Hi-Lo Audible Warning Sound is a clearly identifiable sound which is identified with an emergency evacuation.

Subsection (b) is added to establish parameters for the Hi-Lo Audible Warning Sound's output. This is necessary to provide specifications regarding the Hi-Lo Audible Warning Sound. The intent is to provide the public a sound which is consistent and easily identifiable for emergency evacuations.

Subsection (b)(1) is added to establish a minimum and maximum sound performance criterion, as measured in decibels, for the Hi-Lo Audible Warning Sound. This is necessary to be effective in warning the public during emergency evacuations.

Subsection (c) is added to establish Hi-Lo Audible Warning Sound duration requirements.

Subsection (c)(1) is added to establish three cyclical frequencies determined to be the regulatory standard for the Hi-Lo Audible Warning Sound, designated in Hertz (Hz), as recognized by original equipment manufacturers of sirens, signals, or sound devices. This regulation allows authorized users to select one of three tones for use, the specific selection of which may be necessary due to the availability of the specified sounds or the limitations of existing installed sirens, sounds, or signal devices.

Subsection (c)(1)(A) is added to establish the standard of 659-554 Hz cycles per second (CPS), which is a recognized industry Hi-Lo Audible Warning Sound range, commonly referred to as the "European Hi-Lo."

Subsection (c)(1)(B) is added to establish the standard of 932-740 Hz CPS, which is a recognized industry Hi-Lo Audible Warning Sound range, commonly referred to as the "USA Hi-Lo."

Subsection (c)(1)(C) is added to establish the standard of 1244-1046 Hz CPS, which is a proposed industry Hi-Lo Audible Warning Sound range, to be identified as the “California Hi-Lo.”

Subsection (c)(2) is added to establish minimum and maximum operational mode cycling rates, as well as requiring the tone to have continuous operation without a break or pause between the tone. This is necessary to provide a consistent Hi-Lo Audible Warning Sound which is easily identifiable with emergency evacuations.

Subsection (c)(3) is added to establish that only one of the three required sound duration types may be used for a Hi-Lo Audible Warning Sound. This regulation provides options to an authorized user or manufacturer of a device to comply with the regulations due to hardware or software limitations or requirements in existing equipment installations, and provides options for future hardware installations. This is necessary to ensure the Hi-Lo Audible Warning Sound is consistent and remains easily recognizable to the public.

Section 1029.3. Hi-Lo Audible Warning Sound Conformance, Maintenance, and Testing

This section is added to Title 13, CCR, Division 2, Chapter 4, Article 8.5, to establish Hi-Lo Audible Warning Sound conformance, pursuant to Section 27002 CVC. This section is added to establish requirements for Hi-Lo Audible Warning Sound device conformance, testing, and maintenance. Only a Hi-Lo Audible Warning Sound meeting the parameters set forth in this section is compliant with the requirements established by the Department.

Subsection (a) is added to require documentation be retained by the authorized user of the Hi-Lo Audible Warning Sound for the service life of the device. The CHP has determined that this documentation retention is needed to provide proof of compliance for an installed device.

Subsection (a)(1) is added to require the authorized user to install, test, and maintain the Hi-Lo Audible Warning Sound using procedures provided by the original equipment manufacturer. The CHP has determined the manufacturers are the appropriate entity to establish procedures for their respective proprietary equipment to conform to the proposed standards.

Subsection (a)(2) is added to require that any testing, maintenance, and usage training of the Hi-Lo Audible Warning Sound should not be conducted at a location where inadvertent response to the sounding of the device could occur. This is necessary to prevent the public from excessive exposure to the specified sound, resulting in both a diminished impact of the intended use of the Hi-Lo Audible Warning Sound and an unintended reaction to the sound. It also serves to reduce the general impact of the sound as a nuisance in a location where testing may occur regularly.

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

This section is added to Title 13, CCR, Division 2, Chapter 4, Article 8.5, to establish Hi-Lo Audible Warning Sound public education and user training, pursuant to Section 27002 CVC. This section is added to establish requirements for Hi-Lo Audible Warning Sound public education and authorized user training. Only a Hi-Lo Audible Warning Sound meeting the parameters set forth in this section meets the requirements established by the Department.

Subsection (a) is added to require authorized users to provide educational information to the public regarding the Hi-Lo Audible Warning Sound and its use as a notification for the need of an immediate evacuation in the case of an emergency. This enhances safety by familiarizing the public with the Hi-Lo Audible Warning Sound and emergency situations which warrant its use.

Subsection (a)(1) is added to require authorized users to hold education events to inform the public that the Hi-Lo Audible Warning Sound is being utilized. These events should provide information about the Hi-Lo Audible Warning Sound and education about emergency situations.

Subsection (a)(2) is added to require authorized users to create a public notice on their Web site to inform the public the Hi-Lo Audible Warning Sound is being utilized. These notices should provide information about the Hi-Lo Audible Warning Sound and education about emergency situations.

Subsection (a)(3) is added to require authorized users to provide a public notice to regional media outlets to inform the public the Hi-Lo Audible Warning Sound is being utilized. These notices should provide information about the Hi-Lo Audible Warning Sound and education about emergency evacuations.

Subsection (b) is added to require authorized users to provide training to personnel for the proper use of the Hi-Lo Audible Warning Sound. Training is required which includes the importance of warning against the indiscriminate use of the Hi-Lo Audible Warning Sound. This is necessary to familiarize personnel with the use of the Hi-Lo Audible Warning Sound and outline emergency situations which warrant its use.

STUDIES/RELATED FACTS

None.

LOCAL MANDATE

These regulations do not impose any new mandate on local agencies or school districts.

IMPACT ON SMALL BUSINESS

The CHP has not identified any significant adverse effect on small businesses. The proposed regulations do not increase any requirements upon any small businesses. Due to the fact this proposed rulemaking is merely establishing standards and specifications for the permissive use of the Hi-Lo Audible Warning Sound, limited to authorized users of authorized emergency vehicles, this proposed rulemaking will have little impact on jobs.

ALTERNATIVES

The CHP has not identified any alternative, including the no-action alternative, which would be more effective and less burdensome for the purpose for which this action is proposed. Additionally, the CHP has not identified any alternative which would be as effective and less burdensome to affected persons other than the action being proposed.

ECONOMIC IMPACT ANALYSIS

Economic Impact on Businesses

The CHP has not identified any significant adverse impact on businesses. Businesses subject to this regulation are currently required to comply with the CVC and Title 13, CCR, and therefore, the amendment of regulations to provide additional clarity of the requirements provides no additional impact on industry.

Economic Impact on Jobs

The CHP has made a determination that this proposed regulatory action will neither create or eliminate jobs in the State of California, nor result in the elimination of existing businesses, nor create or expand businesses in the State of California. Additionally, this proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states.

Benefits of the Regulation

This proposed regulatory action will provide a nonmonetary benefit to the protection and safety of public health, employees, and safety to the environment by establishing standards and specifications for the use of the Hi-Lo Audible Warning Sound that may be used for the purpose of warning individuals of an immediate evacuation in the case of an emergency. The CHP has made an initial determination this proposed regulatory action will result in:

- No effect on housing costs;
- No new mandate upon local agencies or school districts;
- No nondiscretionary costs or savings to any local agency, no cost to any local agency or school district for which Sections 17500-17630 of the Government Code require reimbursement, no cost or savings to any state agency, nor costs or savings in federal funding to the state;
- Neither the creation or elimination of jobs in the State of California, nor result in the elimination of existing businesses, nor create or expand businesses in the State of California;
- No significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states;
- A continued nonmonetary benefit to the protection and safety of public health and employees; and
- Safety to the environment by providing an updated regulatory authority for enforcement efforts.

NO SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESS

This proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states. The Department has determined these regulation amendments will result in:

- No significant increase in costs for owners or operators of affected vehicles. This rulemaking action will simply provide a regulatory basis to provide consistency between the CVC and Title 13, CCR;
- No significant compliance cost for persons or businesses directly affected;
- No discernible adverse impact on the quantity and distribution of goods and services to large and small businesses or the public;
- No impact on the level of employment in the state; and

- No impact on the competitiveness of California to retain businesses, as the state has already adopted these requirements.