

Regulatory Analysis Form		This space for use by IRRRC	
(1) Agency Transportation		2007 APR 27 PM 2: 27 INDEPENDENT REGULATORY REVIEW COMMISSION	
(2) I.D. Number (Governor's Office Use) No. 18-404		IRRC Number: 2510	
(3) Short Title Flashing and Revolving Lights on Emergency and Authorized Vehicles			
(4) PA Code Cite 67 Pa. Code, Chapter 173		(5) Agency Contacts & Telephone Numbers Primary Contact: Raymond Rugh (717) 787-4299 Secondary Contact: Lawrence Allen (717) 772-2123	
(6) Type of Rulemaking (Check One) <input type="checkbox"/> Proposed Rulemaking <input checked="" type="checkbox"/> Final Order Adopting Regulation <input type="checkbox"/> Final Order, Proposed Rulemaking Omitted		(7) Is a 120-Day Emergency Certification Attached? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes: By the Attorney General <input type="checkbox"/> Yes: By the Governor	
(8) Briefly explain the regulation in clear and nontechnical language. This regulation provides the limitations and requirements for flashing and revolving lighting on emergency and authorized vehicles. The purpose of this amendment is to provide greater flexibility and lighting options to ensure that emergency and authorized vehicles have adequate flashing or revolving lights. The regulation also clarifies the flashing or revolving lighting options for an unmarked police car.			
(9) State the statutory authority for the regulation and any relevant state or federal court decisions. Authority for these amendments is found in Sections 4571, 4572 and 6103 of the Vehicle Code,			

Act of June 17, 1976, P.L. 162, No. 81, *as amended* (75 Pa.C.S. §§ 4571, 4572 and 6103)

(10) Is the regulation mandated by any federal or state law or court order, or federal regulations? If yes, cite the specific law, case or regulation, and any deadlines for action.

These amendments to the regulation are not mandated by any federal or state law or court order or federal regulations.

(11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?

Amendments to the existing regulation are required to take advantage of advances in the lighting industry and the need to ensure the visibility of emergency and authorized vehicles for the protection of the public.

(12) State the public health, safety, environmental or general welfare risks associated with non-regulation.

Failure to amend these regulations will continue to prohibit the use of newer and safer lighting configurations on emergency and authorized vehicles.

(13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)

The owners of emergency and authorized vehicles will benefit from this regulation because it will give them more flashing and revolving lighting options. The public will benefit from the amendment to the regulation as improved lighting equipment can be mounted on emergency vehicles.

(14) Describe who will be adversely affected by the regulation. (Quantify the adverse effects as completely as possible and approximate the number of people who will be adversely affected.)

There should be no adverse impact on any people from these amendments to the regulation. This amendment will broaden the types of allowable lighting for emergency and authorized vehicle giving affected people more lighting options.

(15) List the persons, groups or entities that will be required to comply with the regulation. (Approximate the number of people who will be required to comply.)

Entities with emergency and authorized vehicles who wish to affix flashing or revolving lights must comply with this regulation. The department is unable to determine the number of

authorized and emergency vehicles.

(16) Describe the communications with and input from the public in the development and drafting of the regulation. List the persons and/or groups who were involved, if applicable.

These amendments to the emergency lighting regulations are the result of in-depth reviews and discussions conducted by the Pennsylvania State Police. In addition, the Department and State Police sought participation from police departments and sheriffs' offices throughout the state as well as other interest groups in the development of these amendments.

(17) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required.

The costs and/or savings to the regulated community resulting from these amendments are marginal and cannot be calculated with any precision.

(18) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures which may be required.

There should be no costs and/or savings to local governments resulting from these amendments to the regulation.

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required.

There should be no costs and/or savings to state government resulting from these amendments to the regulation.

(20) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	Current FY Year	FY + 1 Year	FY + 1 Year	FY + 3 Year	FY + 4 Year	FY + 5 Year
SAVINGS:	\$ N/A	\$	\$	\$	\$	\$
Regulated Community:	N/A					
Local Government:	N/A					

State Government:	N/A					
Total Savings	N/A					
COSTS:	N/A					
Regulated Community	N/A					
Local Government	N/A					
State Government	N/A					
Total Costs	N/A					
REVENUE LOSSES:	N/A					
Regulated Community	N/A					
Local Government	N/A					
State Government	N/A					
Total Revenue Losses	N/A					

(20a) Explain how the cost estimates listed above were derived.

N/A

(20b) Provide the three year expenditure history for programs affected by the regulation.

Program	FY-3	FY-2	FY-1	Current FY
Approp. 187	\$ 651,000,000	\$ 694,000,000	\$ 770,500,000	\$ 770,500,000

(21) Using cost-benefit information provided above, explain how the benefits of the regulation outweigh the adverse effects and costs.

N/A

(22) Describe the nonregulatory alternatives considered and the costs associated with those

alternatives. Provide the reasons for their dismissal.

There were no nonregulatory alternatives considered. The changes to the permissible lighting for emergency and authorized vehicles could not be effected without amendment of the regulation.

(23) Describe alternative regulatory schemes and the costs associated with those schemes. Provide the reasons for their dismissal.

No alternative regulatory schemes were considered.

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulation.

There are no applicable federal standards governing flashing or revolving lighting on authorized vehicles.

(25) How does this regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?

This regulation will not put Pennsylvania at a competitive disadvantage vis a vis other states.

(26) Will the regulation affect existing or proposed regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

These amendments will not affect other Department regulations or the regulations of any other Commonwealth agency.

(27) Will any public hearings or informal meetings be scheduled? Please provide the dates, times and locations, if available.

No public hearings on these amendments are scheduled at this time.

(28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.

The regulation does not involve or require any reporting, record keeping or other paperwork.

(29) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

These amendments are all designed to meet the particular needs of emergency and authorized vehicles.

(30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?

These amendments will become effective upon publication in final form in the *Pennsylvania Bulletin*.

(31) Provide the schedule for continual review of the regulation.

These provisions will be reviewed periodically as appropriate to keep up with innovations in flashing and revolving lighting and to ensure that the authorized lighting improves the safety of emergency and authorized vehicles as well as the members of the motoring public which come in contact with these vehicles.

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<p>FACE SHEET FOR FILING DOCUMENTS WITH THE LEGISLATIVE REFERENCE BUREAU</p> <p>(Pursuant to Commonwealth Documents Law)</p> <p># 2510</p>	<p>CDL APR 27 PM 2:27</p> <p>INDEPENDENT REGULATORY REVIEW COMMISSION</p> <p>DO NOT WRITE IN THIS SPACE</p>
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<p>Copy below is hereby approved as to form and legality. Attorney General</p> <p>By: _____ (Deputy Attorney General)</p> <p>Date of Approval _____</p> <p><input type="checkbox"/> Check if applicable Copy not approved. Objections attached.</p>	<p>Copy of below is hereby certified to be true and correct copy of a document issued, prescribed or promulgated by:</p> <p style="text-align: center;"><u>Departments of Transportation</u></p> <p style="text-align: center;">DOCUMENT/FISCAL NOTE NO.18-404</p> <p>DATE OF ADOPTION _____</p> <p>BY <u>Allen D. Puhler</u> Secretary of Transportation</p>	<p>Copy below is hereby approved as to form and legality. Executive or Independent Agencies</p> <p>BY <u>Andrew C. Clark</u></p> <p>Date of Approval <u>APR 25 2007</u></p> <p style="text-align: center;">(Deputy General Counsel) (Chief Counsel, Independent Agency) (Strike Inapplicable Title)</p> <p><input type="checkbox"/> Check if applicable. No Attorney General Approval or objection within 30 days after submission.</p>
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**NOTICE OF FINAL RULEMAKING
DEPARTMENT OF TRANSPORTATION**

Title 67. Transportation

Part I. Department of Transportation

Subpart A. Vehicle Code Provisions

Article VII. Vehicle Characteristics

**Chapter 173. Flashing or Revolving Lights on
Emergency and Authorized Vehicles**

Title 67. Transportation
Part I. Department of Transportation
Subpart A. Vehicle Code Provisions
Article VII. Vehicle Characteristics
Chapter 173. Flashing or Revolving Lights on
Emergency and Authorized Vehicles

Notice of Final Rulemaking

Preamble

The Department of Transportation, pursuant to the authority contained in Sections 4571, 4572, and 6103 of the Vehicle Code, Act of June 17, 1976, P.L. 162, No. 81, *as amended* (75 Pa.C.S. §§ 4571, 4572, and 6103), amends Chapter 173 of the Department of Transportation Regulations, Title 67, as set forth in Annex A to this Notice.

Purpose of Chapter

This regulation provides the limitations and requirements for flashing and revolving lighting on emergency and authorized vehicles. The purpose of Chapter 173 is to set forth the nature, display, color, standards and configuration for flashing, revolving and oscillating lights that may be displayed on emergency and authorized vehicles.

Purpose of the Amendments

The purpose of these amendments to Chapter 173 is to provide greater flexibility and lighting options to ensure that emergency and authorized vehicles have adequate flashing or revolving lights. The amendments allow the use of flashing and revolving lights which were not envisioned or available at the time the regulation was originally

adopted. The regulation also clarifies the flashing or revolving lighting options and requirements for an unmarked police car.

These regulations reflect the joint effort of the Pennsylvania State Police and the Department of Transportation. The State Police also solicited advice and recommendations from local police departments and other law enforcement officials throughout the state, as well as members of the emergency lighting industry.

Summary of Comments and Responses

Section 173.2 (definitions)

Comment: The Independent Regulatory Review Commission (IRRC) found the definition of “intersection light” in § 173.2 unnecessary and too broad.

Response: The Department considered IRRC’s comments and amended the definition for clarity.

Comment: IRRC expressed confusion about the use of the terms flashing lights and oscillating lights.

Response: The Department removed the definition of oscillation, added a definition of oscillating light, and removed the word oscillation from the definition of flashing light.

Section 173.3(a)(color)

Comment: A retired police officer, Michael DalPezzo, noted that there is no authorization for green lights designating command vehicles. He also opined that it is impossible to “exceed” standards for chromaticity coordinates.

Response: There is no need for any particular vehicle to display green lights. Although flashing green lights are used to designate command *areas*, they are not specific to particular command *vehicles*. Under the Incident Command System (ICS), multiple agency response could potentially bring multiple vehicles equipped with green lights to an incident scene, causing confusion among responders as to where a command center was located. Further, a portable green light could be maintained in a vehicle and used as necessary at the scene of an emergency.

With respect to the observation that it is impossible to exceed standards for chromaticity coordinates, it is important to note that the CIE 1931 standard was devised in 1931 using wavelengths of light that were perceived as specific colors by persons with normal visual acuity. The standard has been revised twice in the past. Consequently, this language is intended to take into consideration any future revisions to the CIE 1931 standard.

Section 173.3 (a) (3) (blue lights)

Comment: The City of Philadelphia Fire Department opined that personnel of for-profit ambulance services should not be authorized to use emergency lighting. IRRC questioned whether personnel from those services are eligible to use blue lights and asked who is the “chief” of a private company? IRRC and the PEHSC asked whether “quick responder services” personnel can use blue lights and asked the Department to clarify the types of organizations that may allow blue lights on personal vehicles.

Response: The personnel of all ambulance services are entitled to use blue lights in accordance with 75 Pa. C.S. § 4572. Pursuant to 35 P.S. § 6932, all ambulances in the Commonwealth must be licensed by the Pennsylvania Department of Health, whether they are for profit or not. The license requirements in 28 Pa. Code Chapter 1005 require emergency lighting on all Basic Life Support (BLS) ambulances in conformance with 75 Pa. C.S. §§ 4571 and 4572. Therefore, the status of the agency as “for profit,” volunteer, or municipally employed is moot.

Section 173.3(a)(4) (combination red and blue lights)

Comment: The Chiefs of Police Association commented that only police officers should be allowed to use a combination of red and blue lights.

Response: The authority for using combination red and blue lights is granted in 75 Pa. C.S. § 4571(b)(1) and extends to police, sheriff, coroner, medical examiner and fire police vehicles. The regulation cannot establish a narrower scope contrary to the statute. .

Section 173.3(a)(5)(iii) (yellow or amber lights)

Comment: IRRC commented that the language of § 173.3(a)(5)(iii) (yellow or amber lights) should be simplified to state that these lights “shall be mounted to only flash or shine rearward.” Mr. DalPezzo recommended allowing Fire Police officers to use traffic control emergency light assemblies.

Response: The Department considered and rejected Mr. DalPezzo's suggestion. Section 4571(b.1)(2) of the Vehicle Code limits the use of traffic-control emergency directional light assemblies to emergency vehicles. The privately-owned vehicles of fire police officers are not emergency vehicles and are regulated by § 4572 of the Vehicle Code. Therefore, those vehicles are not entitled to use traffic-control emergency directional light assemblies. However, fire police vehicles that are owned by a fire company *are* entitled to use combination red and blue lights as well as traffic-control emergency directional light assemblies. In response to IRRC's comments, the Department amended the language of subsection (a)(5)(iii).

Section 173.3 (a)(6) (white or clear lights)

Comment: The PEHSC asked about the rationale for increasing the number of white or flashing lights. The City of Philadelphia Fire Department and IRRC asked the Department to clarify whether a vehicle can have a total of four white or clear lights by combining a single light with a light-bar assembly. IRRC expressed three additional concerns about this section. First, the Department should clarify the need for and intent of the subsection and whether a light created via reflection by mirrors is counted as a separate and unique light. Second, subparagraphs (i) and (ii) may conflict with existing systems and procedures. Third, the phrase "preemptive traffic control devices" is not defined. Finally, Michael DelPazzo opined that the restrictions in this section are unworkable and unenforceable.

Response: The Department considered all comments received concerning this section and made revisions to clarify the section. The three white lights can only be used as part of a light bar assembly. In some light bar configurations, two white lights are used as intersection lights mounted on the outboard sides of the light bar. An optional third white light was added to allow for a forward-facing center-mounted light for the purpose of signaling traffic directly in front of an emergency vehicle.

Section 173.3(a)(8) (utility lights)

Comment: IRRC and Mr. DalPezzo found this section unclear and confusing.

Response: The Department revised the language of this subsection for clarification.

Section 173.3(b)(360 degree visibility)

Comment: IRRC recommended reformatting this section for clarity.

Response: The Department accepted IRRC's suggestion and reformatted this subsection.

Comment: The Pennsylvania Emergency Health Services Council (PEHSC) recommended that front bumper-mounted lights should only be red.

Response: The Department considered and rejected the PEHSC's suggestion in order to give emergency vehicles, other than ambulances, the option of using lights of other colors. Pursuant to 28 Pa. Code § 1005.10(b)(1) (Licensing of BLS and ALS

Ground Ambulance Services), emergency lights on ambulances must conform to Federal standard KKK-A-1822E, which requires that front bumper-mounted lighting be red.

Therefore, ambulances will not be affected by his change.

Section 173.3(d) (mounting location)

Comment: Mr. DalPezzo suggested adding a subsection, (d)(5), to address the mounting of blue lights on authorized vehicles. IRRC noted that subsection (d)(1)(v)(A) refers to “private vehicles” and “emergency calls” as defined by § 102 of the Vehicle Code, but those are not separately-defined terms in § 102. Mr. DalPezzo also found this section confusing. IRRC asked the Department to reformat subparagraphs (d)(3)(i)(E)(i)-(iv) to conform to *Pennsylvania Code Bulletin* requirements. With respect to (d)(3)(ii), the Pennsylvania Chiefs of Police Association said that law enforcement should be able to put strobe packs inside corner parking lamps, break lamps, or inside back-up lamps and the proposed regulations should permit the use of flash back-up white lamps in conjunction with flashing red tail lamps. Finally, IRRC was unclear as to the intent of the restrictions contained in subsection (d)(4).

Response: In consideration of these comments, subsection 173.3(d) was reformatted and revised for clarification. The Department considered and rejected Mr. DalPezzo’s suggestion of adding a new subsection (d)(5) to address mounting of blue lights. The mounting of lights is already addressed in § 173.3 (e)(3), which applies to all authorized vehicles regardless of the color of the light. With respect to the concern expressed by the Pennsylvania Chiefs of Police Association, police vehicles are entitled

to use strobe packs at the listed locations on a vehicle in accordance with § 173.3(d)(2)(vii).

Statutory Authority

These regulations are amended under the authority contained in Sections 4571, 4572, and 6103 of the Vehicle Code, Act of June 17, 1976, P.L. 162, No. 81, *as amended* (75 Pa.C.S. §§ 4571, 4572, and 6103).

Persons and Entities Affected

These regulations affect all owners of emergency and authorized vehicles who are qualified to display flashing or revolving.

Fiscal Impact

Implementation of these regulations will not require the expenditure of any additional funds by the Commonwealth or local municipalities. These regulations will not impose any additional costs on the regulated community and may reduce costs by providing more lighting options for emergency and authorized vehicles.

Regulatory Review

Under Section 5(a) of the Regulatory Review Act, (71 P.S. § 745.5(a)), the agency, on December 6, 2005, submitted a copy of the notice of proposed rulemaking, published at 45 Pa. B. 6769, to the Independent Regulatory Review Commission (IRRC)

and to the Chairpersons of the House and Senate Transportation Committees for review and comment.

In preparing this final-form rulemaking, the Department has considered all comments received from IRRC and the public; no comments were received from the committees.

Under section 5.1(j.2) of the Regulatory Review Act, on _____, 2007, this final-form regulation was deemed approved by the House and Senate Transportation Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on _____, 2007 and approved the final-form regulation.

Sunset Provisions

The Department of Transportation will make these regulations effective upon publication in final form following appropriate evaluation of any comments, suggestions or objections received during the period allowed for public comment. The Department is not establishing a sunset date for these regulations, since these regulations are needed to administer provisions required pursuant to the Vehicle Code (75 Pa. C.S. 1.01, et seq.). The Department, however, will continue to closely monitor these regulations for their effectiveness.

Contact Person

The contact person for technical questions about the proposed amendments to the regulations is Lawrence Allen, Equipment Division, 17th and Arsenal Boulevard, Harrisburg, Pennsylvania 17120, telephone number: (717) 787-2123.

Order

The Department of Transportation orders that:

- (A) The regulations of the Department of Transportation, 67 Pa. Code, are amended by the adoption of amendments to Chapter 173 as set forth in Annex A.
- (B) The Secretary of the Department of Transportation shall submit this Order and Annex A hereto the Office of General Counsel and the Office of Attorney General for approval as to legality and form, as required by law.
- (C) The Secretary shall certify this Order and Annex A and deposit the same with the Legislative Reference Bureau, as required by law.
- (D) This Order shall take effect upon publication in the *Pennsylvania Bulletin*.

Allen D. Biehler, P.E.
Secretary of Transportation

Annex A

TITLE 67. TRANSPORTATION

PART I. DEPARTMENT OF TRANSPORTATION

Subpart A. VEHICLE CODE PROVISIONS

ARTICLE VII. VEHICLE CHARACTERISTICS

**CHAPTER 173. FLASHING OR REVOLVING LIGHTS ON
EMERGENCY AND AUTHORIZED VEHICLES**

§ 173.1. Purpose.

This chapter pertains to the nature, display, color, minimum performance standards and configuration of flashing, oscillating, or revolving lights that are permissible for display by emergency and authorized vehicles.

§ 173.2. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

Authorized vehicle—The term as defined in 75 Pa.C.S. § 102 (relating to definitions).

Emergency vehicle—The term as defined in 75 Pa.C.S. § 102.

Flash—An intermittent burst of light.

Flash rate—The rate of flash, revolution or oscillation per minute of a single light, when that light is observed from a fixed position.

Flashing headlamp system—A system designed to automatically flash the high intensity—high beam—portion of the headlamps of a vehicle in either an alternate or simultaneous flash. The system shall be designed so that activation of the high intensity—high beam—portion of the standard headlamp system overrides the flashing headlamp system.

Flashing light—A light designed to flash by current interruption, ~~oscillation~~[of the lamp or current, or by revolution of the lamp], or by any other means providing an intermittent change in intensity when the light is observed from a fixed position.

Hazard warning system—Driver-controlled flashing front and rear lights used to warn approaching motorists when a vehicle is broken down or is traveling at a slow speed.

Intersection light—A flashing red [light device, mounted on the upper portion of each front fender of an emergency vehicle, and used as a part of the flashing or revolving light system to enhance the visibility of an emergency vehicle as it approaches or travels through an intersection], blue, white, or clear light used as part of a flashing, OSCILLATING, or revolving light system to enhance the visibility of an emergency vehicle FROM THE FRONT AND SIDE as it approaches or travels through an intersection.

Light activation indicator—An audible signal or an illuminated switch or pilot light which provides the driver of an emergency or authorized vehicle with a clearly audible or visible and continual indicator that a flashing or revolving light, flashing headlamp system, traffic control emergency directional light, or authorized nonflashing or nonrevolving light is activated.

Light-bar assembly—A device or devices designed and constructed to provide and display more than one steady burning, flashing, oscillating, or revolving [beam of] light.

Oscillation—~~Movement back and forth between two or more points, including the alternation between the maximum and minimum voltage.~~

OSCILLATING LIGHT—A LIGHT DESIGNED TO FLASH BY MOVEMENT BACK AND FORTH BETWEEN TWO OR MORE POINTS, INCLUDING THE ALTERNATION BETWEEN THE MAXIMUM AND MINIMUM VOLTAGE.

Revolving light—A light designed to give the appearance of flashing by its rotation around a fixed axis through a 360° arc, on a horizontal plane.

Single light—A device containing one or more lenses, lamps or bulbs which are designed to produce, when viewed from a fixed position or point, the appearance of one flashing or revolving beam of light.

Traffic control emergency directional light assembly—A device electronically designed to display amber or yellow warning signal lights in a distinctive motion-lighting pattern—arrow left, arrow right, center out or alternately flashing — to warn motorists that they are approaching a hazard or to direct them around an impending hazard.

Unmarked police vehicle—A police vehicle not equipped with a roof-mounted light-bar assembly. The vehicle may display graphics, markings or decals, identifying the agency or department.

§ 173.3. Display requirements.

(a) *Color.* White, clear, red, blue, amber or yellow are the only colors permitted for use in flashing or revolving lights.

(1) *Chromaticity coordinates.* A flashing, [or] revolving or oscillating light shall [comply with] meet or exceed the Chromaticity Coordinates, CIE 1931, Standard Colorimetric System as provided in SAE Standard J578d, Color Specification for Electrical Signal Lighting

Devices, September 1978 or subsequent SAE Standards. This requirement does not apply to flashing headlamp systems.

(2) *Red lights*. A vehicle may display red lights as provided by 75 Pa.C.S. § 4571 (relating to visual and audible signals on emergency vehicles). [as follows:

(i) Under 75 Pa.C.S. § 4571 (relating to visual and audible signals on emergency vehicles), an emergency vehicle, as defined in 75 Pa.C.S. § 102 (relating to definitions), shall be equipped with one or more flashing or revolving red lights.

(ii) Under 75 Pa.C.S. § 4571, Pennsylvania Public Utility Commission vehicles used for the enforcement of 66 Pa.C.S. Chapters 23 and 25 (relating to common carriers; and contract carrier by motor vehicle and broker) may be equipped with flashing or revolving red lights.]

(3) *Blue lights*. A vehicle may display blue lights as provided for by [Under] 75 Pa.C.S. § 4572(a) (relating to visual signals on authorized vehicles). Vehicles described in 75 Pa.C.S. § 4572(a) may be equipped with a light-bar assembly using only blue lights. [, ambulance personnel, owners and handlers of dogs used in tracking humans, and volunteer firefighters may each equip one personal vehicle with no more than two flashing or revolving blue lights or one light-bar assembly containing no more than two blue lights. Only blue lights may be used on the light-bar assembly.] See Figure 3.1.

(4) *Combination red-and-blue lights*. Vehicles listed [U]nder 75 Pa.C.S. § 4571(b) may display combination red-and-blue lights. [, police, sheriff, coroner, medical examiner or fire police vehicles may be equipped with flashing or revolving blue lights in addition to red lights—combination red-and-blue lights.] The privately-owned vehicles listed under 75 Pa.C.S. § 102 (relating to definitions of an emergency vehicle) [of a police chief, assistant

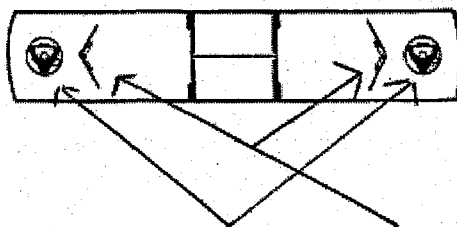
police chief, fire police captain and fire police lieutenant] shall be equipped under [paragraph (2)] 75 Pa.C.S. § 4571(a).

(5) *Yellow or amber lights*. A vehicle may display yellow or amber lights as follows:

(i) Under 75 Pa.C.S. § 4572(b) (relating to visual signals on authorized vehicles), an authorized vehicle as defined in 75 Pa.C.S. § 102 and designated in Chapter 15 (relating to authorized vehicles and special operating privileges) may be equipped with [no more than two] flashing or revolving yellow or amber lights or one or more light-bar [assembly] assemblies containing [no more than two] only yellow or amber lights. [Only yellow or amber lights may be used on the light-bar assembly.] See Figure 3.1.

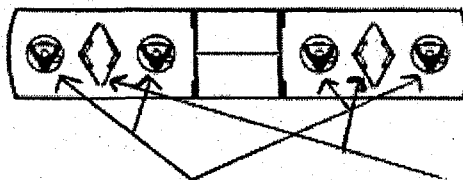
FIGURE 3.1

ILLUSTRATIONS OF LIGHT-BAR ASSEMBLIES *



Rotating halogen lamps—"V" mirrors

(contains two single lights)



Rotating halogen lamps—"diamond" mirrors

(contains four single lights)

* THESE ILLUSTRATIONS REPRESENT TWO COMMON MODELS OF LIGHT-BAR ASSEMBLIES. OTHER LIGHT-BAR ASSEMBLIES MAY BE USED.

(ii) An authorized vehicle which is used in the construction, repair or maintenance of a bridge or highway maybe equipped with traffic control emergency directional light assemblies.

~~[(ii)]~~ (iii) Emergency vehicles may be equipped with [no more than two] yellow or amber lights, in addition to [one] traffic control emergency directional light [assembly] assemblies. Such yellow or amber lights shall be mounted on the rear of the vehicle or shall face rearward SO THAT IT IS VISIBLE FROM BEHIND THE VEHICLE.

(6) *White or clear lights.* In addition to flashing or revolving red or combination red-and-blue lights, an emergency vehicle may be equipped with a flashing headlamp system and no more than one flashing, [or] revolving, or oscillating white or clear light, ~~except [that] an emergency vehicle may be equipped with a~~ OR WITH A light-bar assembly containing no more than [two] three flashing, [or] revolving, or oscillating white or clear lights. ~~This section does not include~~ THE VEHICLE MAY ALSO BE EQUIPPED WITH ADDITIONAL preemptive traffic control devices.

(i) When the light-bar assembly contains three flashing, revolving or oscillating white or clear lights, the center light must be mounted to flash white or clear light only to the front.

(ii) When the vehicle is stationary, the light-bar assembly shall not display white or clear light to the rear.

~~[(i)]~~ (iii) Flashing, [or] revolving, or oscillating white or clear lights and flashing headlamp systems may only be used in conjunction with the flashing or revolving red or

combination red-and-blue lights. Flashing, [or] revolving, or oscillating white or clear lights and flashing headlamp systems that are not used in conjunction with flashing or revolving red or combination red-and-blue lights do not constitute visual signals under 75 Pa.C.S. § § 3325 and 4571 (relating to duty of driver on approach of emergency vehicle; and visual and audible signals on emergency vehicles).

[(ii) Flashing headlamp systems are to be used under 75 Pa.C.S. § 4306 (relating to use of multiple-beam road lighting equipment).]

(7) *Steady burning lights.* [Unauthorized colored, white or clear] Red, blue, amber or yellow nonflashing or nonrevolving lights—steady burning lights—may [not] be used in conjunction with flashing or revolving lights. [, except for steady burning lights used on emergency vehicles as specified in 75 Pa.C.S. § 4571(a) and (b)(3). These lights, which include flood lights and other steady burning lights, may be used only while the vehicle is stationary, except that a police officer, sheriff or deputy sheriff operating a police or sheriff vehicle may use these lights while the vehicle is in motion, if the lights are used only for the purpose of an emergency, or for the safety of the public or in the enforcement of the law.]

(8) Utility lights. Clear or white forward or side facing steady burning utility lights (i.e., take down, alley, spotlight) shall not be used for emergency warning purposes AS A VISUAL SIGNAL FOR PURPOSES OF 75 PA.C.S. § 3325. These lights may be used while the vehicle is in motion or stationary for the purpose of an emergency, for the safety of the public, or in the enforcement of the law.

[(8)] (9) *Other lights.* A vehicle, other than those identified in this [subsection] chapter, may not be equipped with lights or systems identical or similar to those specified by this subsection, except that school buses and urban mass transit buses which will be used for

carrying school children may be equipped with flashing lights as permitted by 75 Pa.C.S. §§ 4552(b) and 4553(a) (relating to general requirements for school buses; and general requirements for other vehicles transporting school children), and Chapter 15 and Chapter 171 (relating to school buses and school vehicles).

~~[(9)]~~ (10) *Hazard warning systems and turn signals.* Hazard warning systems and turn signals are not considered flashing lights for the purposes of this chapter.

(b) *360° visibility.* Except for unmarked police vehicles, when [When] flashing or revolving red, blue, yellow or amber lights are mounted on a vehicle, one or more of these lights shall be mounted to provide visibility to vehicles approaching from any direction (360° visibility), regardless of the method of mounting. [Emergency vehicles equipped with flashing or revolving red or blue lights mounted on or behind the grille are not exempt from this subsection.]

(1) When only one light is used to provide 360° visibility, this light shall be in compliance with SAE Standard J845, 360° Emergency Warning Lamps, [January 1984] May 1997, or subsequent SAE Standards.

(2) When more than one light is used to provide 360° visibility, the number of lights used may not exceed those specified in 75 Pa.C.S. §§ 4571 and 4572.

~~(3)~~ [For emergency vehicles, 360° visibility shall be provided by one or more red lights.

(4) Vehicles that are equipped with a light-bar assembly are presumed to have met the 360° visibility requirements when the flashing or revolving light configuration is visible to vehicles approaching from any direction.]

(C) VISIBILITY FOR UNMARKED POLICE VEHICLES. When the combination of lights are mounted on an unmarked police vehicle, these lights shall be mounted to provide

visibility to vehicles approaching from the front and rear, regardless of the method of mounting.

(e) (D) Flash rate. The flash rate, when observed from a fixed position, shall be between 60 and [120] 260 flashes per minute. When the flash rate is produced by the interruption of current, the period of illumination shall be long enough to permit the bulb to come to full brightness.

(d) (E) Mounting location. The following applies to mounting locations for flashing or revolving lights:

(1) Emergency vehicles, except police vehicles. Flashing or revolving lights, excluding flashing headlamp systems, may be permanently mounted on the vehicle or attached to a mounting device, in a workmanlike manner, in the following locations only:

(i) On a cab or roof of the vehicle.

(ii) No more than 18 inches above the highest fixed point of the vehicle.

[(iii) On the front of a dump truck bed.]

[(iv)] (iii) Behind, in front of, or on the grille of emergency vehicles. A flashing light may [not] be mounted so [that it flashes through the grille, except that no more than two flashing red or blue lights, excluding light-bar assemblies, may be mounted so] as to flash through or in front of the grille on emergency vehicles when the vehicle is also equipped with one or more flashing or revolving red lights that meet the 360° visibility requirements of subsection (b).

[(v)] (iv) With respect to fender intersection lights. [C]close to the front upper edge of each front fender of an emergency vehicle and not protruding more than 2 inches from the fender, [with respect to intersection lights.]

(v) Inside of existing vehicular lighting modules/assemblies, such as headlights, parking lights, taillights. This does not include reverse lights.

(A) This subsection does not include APPLY TO private PRIVATELY OWNED vehicles used for answering emergency calls as defined by THAT OTHERWISE QUALIFY AS EMERGENCY VEHICLES AS DEFINED IN 75 Pa.C.S. § 102.

(B) Vehicles mounting lights as outlined in this subsection shall also mount, in another location,, flashing or revolving lights that meet the 360° visibility requirements. This does not include reverse lights.

(2) [Traffic control emergency directional light assemblies shall be rear-facing only and may not interfere with permanently installed lights. These assemblies] Police vehicles. Flashing or revolving lights may be permanently mounted on the vehicle or attached to a mounting device, in a workmanlike manner, in the following locations only:

(i) Underneath or behind light-bar assemblies.

(ii) On the rear deck, inside or outside of the vehicle.

(iii) On the trunk lid.]

(i) On a cab or roof of the vehicle.

(ii) No more than 18 inches above the highest fixed point of the vehicle.

(iii) With respect to combination red-and-blue lights only, behind, in front of, or on the grille. Police vehicles mounting lights as outlined in this subsection shall also mount flashing or revolving lights in another location visible from the front of the vehicle.

(iv) Inside the passenger compartment, clearly visible through the front windshield.

(See Original Equipment Manufacturer for mounting locations.)

(v) Inside the passenger compartment, clearly visible through the rear window.

(vi) In or on the trunk lid.

(vii) Inside of existing vehicular lighting modules/assemblies, such as headlights, parking lights, taillights (not including reverse lights). Police vehicles mounting lights as outlined in this subsection shall also mount, in another location, flashing or revolving lights visible from the front and rear of the vehicle.

(viii) With respect to flashing lights only, within the non-driver's compartment-side window.

(xi) With respect to combination red-and-blue lights, in a location visible from the front and rear of the vehicle.

(xii) With respect to fender intersection lights, close to the front upper edge of each front fender of a police vehicle and not protruding more than two inches from the fender.

(xiii) With respect to motorcycles, at a location in accordance with the manufacturer's specifications.

(3) Authorized vehicles: Flashing or revolving lights may be permanently mounted on the vehicle or attached to a mounting device, in the following locations only:

(i) On a cab, cab protector or roof of the vehicle.

(ii) No more than 18 inches above the highest fixed point of the vehicle.

(iii) On the front or rear of the bed or body of an authorized vehicle.

(iv) On the tailgate of an authorized vehicle.

(vi) In a location other than as set forth in Subsections (i) – (iv) as needed to comply with the 360 degree requirement in Section 173.3.

The installation or use of additional flashing or strobe lights in existing vehicular lighting modules/assemblies, such as headlights, parking lights, taillights, is expressly prohibited.

(4) Traffic control emergency directional light assemblies. Traffic control emergency directional light assemblies may not interfere with permanently installed lights. These assemblies may be permanently mounted on the vehicle or attached to a mounting device, in a workmanlike manner, in A LOCATION VISIBLE TO APPROACHING TRAFFIC. the following locations only:

~~(i) Underneath, behind, or built in the light bar assemblies.~~

~~(ii) Anywhere visible through the rear windshield, inside, or outside of the vehicle.~~

~~(iii) In or on the trunk lid.~~

~~(iv) At any other temporary location if a magnetic base is used.~~

~~(v) On the rear of emergency vehicles owned by a fire company.~~

~~(vi) On the roof, bed or gate of an authorized vehicle which is used in the construction, repair or maintenance of a bridge or highway.~~

(e) *Mounting devices.* Flashing or revolving lights, excluding flashing headlamp systems, grille-mounted flashing lights and intersection lights, may be mounted on one of the following devices:

(1) A magnetic base.

(2) A roof rack, light-bar or other device that is welded or bolted onto the vehicle, or is mounted on the vehicle by using suction cups equipped with nylon or steel straps and clips which hook onto the drip rail or molding.

(3) A self-leveling gimbal device.

(4) Grommet mounting is acceptable for flush mounted flashing lights.

§ 173.4. Wiring.

All wiring shall be installed using the industry's best practices.

a) Wiring shall be [permanently installed in the vehicle. Separate fuses shall be utilized for the flashing or revolving light system to prevent failure of the standard lighting equipment of the vehicle if the flashing or revolving lights fail.] primary SAE rated and be of proper gauge to handle applied load. Ground wiring shall be of equal gauge.

b) Wiring shall not be loaded to more than 80% of its rated capacity.

c) The wiring shall be permanently installed and routed through the vehicle in such a manner to avoid short circuits or interfering with the operation of the vehicle.

d) Grommets shall be used when wires pass through bulkheads and other sharp metal surfaces.

e) Each accessory will be protected with the proper circuit protection as recommended by the manufacturer (i.e. fuses or circuit breakers). The main circuit protection will be as close to the power source as possible.

f) Additional wiring installed for emergency equipment shall not impede or compromise the original equipment manufacturer circuits or original equipment manufacturer equipment functions as intended by the vehicle manufacturer.

g) Tapping power off of original equipment manufacture circuits, such as in fuse blocks, must be only as recommended by the vehicle manufacturer. Tapping power off air bag or ABS brake and brake light circuits is prohibited.

h) These requirements do not apply to flashing or revolving lights that are attached to a vehicle with a magnetic base.

§ 173.5. Light activation indicator.

Emergency and authorized vehicles which are equipped with lights or light systems provided for in this chapter shall also be equipped with a light activation indicator which will automatically activate whenever a flashing or revolving light, flashing headlamp system, traffic control emergency directional light or authorized nonflashing or nonrevolving light is engaged.

§ 173.6. Nonconforming or authorized lighting systems.

A violation of this chapter is a summary offense and subject to sanctions imposed under 75 Pa.C.S. § 6502(b) (relating to summary offenses). Under 75 Pa.C.S. § 6104(c) (relating to administrative duties of department), the Department of Transportation may make necessary and reasonable investigations to procure information required to enforce this chapter.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

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GOVERNOR'S OFFICE OF
GENERAL COUNSEL

April 27, 2007

Kim Kaufman
Executive Director
14th Floor Harrisstown 2
333 Market Street
Harrisburg, PA 17101

**Re: Final Rulemaking
Regulation # 18-404, 67 Pa. Code Chapter 173 —
Flashing or Revolving Lights on Emergency and
Authorized Vehicles — Final Rulemaking**

Dear Mr. Kaufman:

Enclosed please find a copy of the Face Sheet, Preamble, Annex A and Regulatory Analysis Form for amendment to Chapter 173 of Department regulations which the Department of Transportation intends to adopt in accordance with the provisions of Section 204 of the Commonwealth Documents Law, Act of July 31, 1968, P.L. 769, 45 P.S. § 1204.

Copies of these materials were also delivered today to the majority and minority chairpersons of the Pennsylvania House and Senate Transportation Committees.

The Department of Transportation will provide you with any assistance you require to facilitate a thorough review of this regulation. Thank you for your attention.

Very truly yours,

A handwritten signature in black ink, appearing to read "S. F. J. Martin", with a long horizontal line extending to the right.

Stephen F. J. Martin
Regulatory Counsel

**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO THE
REGULATORY REVIEW ACT**

I.D. NUMBER: #18-404

SUBJECT: Flashing or Revolving Lights on Emergency and Authorized
Vehicles, 67 Pa. Code, Chapter 173

AGENCY: Department of Transportation

TYPE OF REGULATION

- Proposed Regulation
- X Final Regulation
- Final Regulation with Notice of Proposed Rulemaking Omitted
- 120-day Emergency Certification of the Attorney General
- 120-day Emergency Certification of the Governor

INDEPENDENT REGULATORY
REVIEW COMMISSION

2007 APR 27 PM 2:27

RECEIVED

FILING OF REGULATION

<u>DATE</u>	<u>SIGNATURE</u>	<u>DESIGNATION</u>
<u>4/27/07</u>	<u><i>Patricia E. Crowley</i></u> for Majority Chair	SENATE COMMITTEE ON TRANSPORTATION
<u>4/27/07</u>	<u><i>Mike</i></u> for Minority Chair	
<u>4/22/07</u>	<u><i>Mark Prohaska</i></u> for Majority Chair	HOUSE COMMITTEE ON TRANSPORTATION
<u>4/27/07</u>	<u><i>Yuhio Ywnter</i></u> for Minority Chair	
<u>4/27/07</u>	<u><i>Kathy Cooper</i></u>	INDEPENDENT REGULATORY REVIEW COMMISSION
		LEGISLATIVE REFERENCE BUREAU

Date: April 27, 2007