Original: 2510



## COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION OFFICE OF CHIEF COUNSEL

**GENERAL LAW DIVISION** 

POST OFFICE BOX 8212 HARRISBURG, PA 17105-8212 TELEPHONE: (717) 787-5299 FACSIMILE: (717) 772-2741



(717) 787-6485

February 6, 2006

Kim Kaufman, Executive Director Independent Regulatory Review Commission 14<sup>th</sup> Floor Harristown 2 333 Market Street Harrisburg, PA 17101

Re:

**Proposed Rulemaking** 

Regulation # 18-404, 67 Pa. Code Chapter 173 —

Flashing or Revolving Lights on Emergency and Authorized Vehicles

Dear Mr. Kaufman:

Enclosed please find a copy of comments received from Michael K. DalPezzo regarding the above referenced proposed rulemaking, forwarded in accordance with the provisions of Section 745.5(c) of the Regulatory Review Act, 71 P.S § 745.5(c)

Very truly yours,

Stephen F. J. Martin Regulatory Counsel

cc:

Lois Hein, Governor's Office of the Budget w/o attachments Judith Bailets, Staff Assistant, Governor's Policy Office w/o attachments Pamela Lubold, OGC Regulatory Coordinator w/o attachments Eric Madden, Director, Department of Transportation Policy Office

w/o attachments

Original: 2510

## Michael K. DalPezzo

EQUIPMENT DIVISIO830 Mount Zion Road York, Pa 17402

2006 JAN 31 - AM 10: 56

January 5, 2006

Raymond Rugh Chief, Equipment Division 17<sup>th</sup> & Arsenal Boulevard Harrisburg, Pennsylvania 17120 Commonwer of PA Dept. of Tran ortation

FEB 0 2 2006

Office of Chief Counsel

RECEIVED

Sir,

This correspondence is in response to the proposed changes to 67 CS 173.

So you can appreciate my knowledge, training and experience in this topic, I have been used several times in court as an expert in this area. I'm a retired State Police Sergeant, current instructor (teaching equipment standards and even a course specifically on Red & Blue Lights), work as a Paramedic, and volunteer with the local Fire Department. I formerly owned a business that sold these products - but have no remaining ties in this industry.

If you desire, I can come to your office at your convenience to clarify any comments that I will make.

water and the state of the stat

Under 173.3, Display Requirements, (a) Color, I note that there is still no authorization for green lights designating command vehicles. The use of green lights for Command has been a national standard for over 20 years.

Under 173.3, Display Requirements, (a) Color, (1) Chromaticity coordinates, the new proposal states we must "meet or exceed" the standard. It is physically impossible to exceed this standard.

Under 173.3 Display Requirements, (a) Color, (5) Yellow or amber lights, I strongly suggest the following addition:

(iv) Fire Police officers forced to use their privately-owned vehicles in the performance of their duties may be equipped with traffic control emergency directional light assemblies. If the vehicle is not an emergency vehicle; that is, the vehicle is a blue light vehicle, then the assembly shall be magnetically mounted and shall not be visible or displayed unless activated at a stationary traffic-control point.

This device is analogous to the arrow board, and is extremely useful as an aid for traffic direction and control. It's bad enough that Fire Departments generally refuse to provide these volunteers with needed equipment: we should allow them to use all of the tools of their trade.

Proposed Rulemaking, 67 CS 173 January 7, 2006 Page 2

Under 173.3 Display Requirements, (a) Color, (6) White or clear lights, the proposal is to be that one clear light is permitted, or three if in a lightbar. This allowance seems to desire to restrict EVs from blinding motorists – very laudable. However, with the multitude of possible configurations, the restriction is in itself unworkable and unenforceable.

For example, in many systems, mirrors are used to reflect light forward. These mirrors do not count as additional lights - see the very figures contained in this chapter. Systems exist where the actual rotator is displayed through red lenses, but the mirrored portions are clear. Therefore, the clear light does not exist for the purposes of counting lights - an enforcement nightmare. I can show several photographs of this situation. (Photos 1&2)

Due to the anticipated difficulties in enforcement and compliance, it is suggested that the following be substituted:

- (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 or more flashing, revolving, or oscillating white or clear lights.[, except an emergency vehicle may be equipped with a light-bar assembly containing no more than three flashing, revolving, or oscillating white or clear lights.] At no time may the number of white or clear light emitted, including any light reflected from mirrors, exceed the number of red or combination red and blue lights. This section does not include 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.]

The (i) portion of this section was reverse of most systems that use three clear lights. In these systems, two outer lights sweep through intersections while the center rotates. Thus traffic from the rear only sees one light, the center one.

Under 173.3 Display Requirements, (a) Color, (6) White or clear lights, (ii) rear, this subsection requires clear lights to be deactivated to the rear only when the vehicle is stationary. The NFPA (fire) and KKK (ambulance) standards require ALL clear lights to be deactivated when the vehicle is parked. Police cars have no such restriction.

To reduce the blinding effects of EVs parked with their wig-wag headlights and other clear lights activated, this may be a good idea to adopt. Older lighting systems will have difficulty in complying, and numerous organizations would be required to purchase and install cut-outs (because the drivers cannot be relied upon to turn off their clear lights).

Turning off excessive EV lights has been a staple in numerous highway incident safety instructional programs. Perhaps the real solution would be to educate instead of legislate? Clear lights mixed with red or red and blue would be more visible – think of bright sunshine on a high-speed freeway – the clear would make the EV more visible; therefore, safer.

Proposed Rulemaking, 67 CS 173 January 7, 2006 Page 3

Under 173.3 Display Requirements, (a) Color, (8) Utility lights, the statement is that they may not be used for emergency warning purposes. We're unsure what exactly this means, as technology is beyond this. For example, the Vision lightbar used by the State Police and hundreds of other police and fire departments uses the alley and take-down light modules to rotate, oscillate or flash. Whelen's Edge lightbar includes flashing alley lights and flashing take-down lights. Numerous other manufacturers all have optional flashing alleys and take-downs.

What is the intent of this section – simply to leave the *steady-burn* alleys and take-downs off, but they're OK to flash? If that is the case, some clarification is needed.

Under 173.3 Display Requirements, (d) Mounting Location, (1) Emergency Vehicles except police vehicles, (v) within existing light housings

The use of "reverse lights" is confusing. Is it stating that reverse lights cannot be used for warning, like in the "Flash-Back" system, or is it stating that strobes, etc. cannot be installed into reverse light modules?

The Flash-Back systems, which flash brake lights opposite back-up lights, all now include diodes to prevent the vehicle from being taken out of gear (as was the famous situation previously reported). Requiring diodes to be installed, to prevent this, could be mandated.

If the module itself cannot be violated, why? I'd actually rather remove some reflective surface from a back-up light than a brake light.

Under 173.3 Display Requirements, (d) Mounting Location, (1) Emergency Vehicles except police vehicles, there are no provision for the mounting locations required of NFPA and KKK standards. For example, rotating lights are mounted on the backs of these vehicles, flashing lights on the front of ambulance modules, etc, yet these are not locations allowed. See Photo #3 - we suggest the following addition:

(vi) At any other location required by NFPA, KKK, or SAE requirements.

Under 173.3 Display Requirements, (d) Mounting Location, (4) Traffic-Control Emergency Directional Light Assemblies, (v) FD Vehicles – may be mounted only on the rear. The logic and need for this is unclear. In our FD, we use a pick-up that has the TCEDLA mounted in the lightbar. An old police car also used for Fire Police work has one mounted on the inside rear deck. This clause makes both vehicles illegal. The clause was probably designed for conventional Fire Trucks, but it does not specify that.

It is strongly suggested that (v) be deleted in its entirety.

Proposed Rulemaking, 67 CS 173 January 7, 2006 Page 4

Under 173.3 Display Requirements, (d) Mounting Location, Blue Light vehicles are authorized vehicles in the sense that the Vehicle Code definition speaks of "special equipment privileges" however 67 CS 15, which lists the types of authorized vehicles does not include blue lights.

To completely avoid this issue and controversy, the following should be added:

(5) Blue Light Vehicles -- Flashing or revolving lights may be permanently mounted on the vehicle or attached to a mounting device, on the roof of the vehicle only. In the event that this does not provide 360 degree visibility, the vehicle may not be used to display blue lights.

I appreciate the opportunity to put forth the aforementioned comments. I wish to reiterate that I am willing to provide photos, testimony, or just attend meetings to further this Chapter. My home telephone is (717) 840-4807.

Sincerely,

Michael K. DalPezzo