

1200 New Jersey Ave., SE Washington, D.C. 20590

In Reply Refer To: HOTO-1

Mr. Arlen Yost President OMJC Signal, Inc. P.O. Box 1594 Waterloo, IA 50704

Dear Mr. Yost:

Thank you for your e-mail of May 9 to Mr. Scott Wainwright of our Manual on Uniform Traffic Control Devices (MUTCD) Team requesting an Official Interpretation of the MUTCD regarding whether conflict monitoring of temporary and portable traffic signals is required, recommended, or optional. You asked for an update of unofficial guidance that Mr. Wainwright had provided in a February, 2006, email to another supplier of temporary and portable traffic signals, and you asked several specific questions on this subject.

It is our Official Interpretation that the use of a conflict monitor with all temporary and portable traffic signals used in a temporary traffic control zone, unless such signals are manually controlled by an on-site flagger or other means that the highway agency determines to be adequate to prevent the display of conflicting indications, is a Guidance ("should") condition in the MUTCD. Highway agencies should only deviate from this recommended practice based on an engineering study or engineering judgment. Our reasoning for this interpretation is as follows.

The language in the MUTCD pertinent to the issue at hand has been revised since the unofficial guidance was provided in 2006. That guidance cited the 2003 edition of the MUTCD, which has been superseded by the 2009 edition. The pertinent text of the 2009 MUTCD is as follows:

- Section 4D.32, paragraph 03, item A: "A temporary traffic control signal shall meet the physical display and operational requirements of a conventional traffic control signal."
- Section 4D.32, paragraph 07: "For use of temporary traffic control signals in temporary traffic control zones, reference should be made to Section 6F.84."
- Section 6F.84, paragraph 01: "Temporary traffic control signals (see Section 4D.32) used to control road user movements through TTC zones and in other TTC situations shall comply with the applicable provisions of Part 4."



- Section 6F.84, paragraph 03: "A temporary traffic control signal that is used to control traffic through a one-lane, two-way section of roadway shall comply with the provisions of Section 4H.02."
- Section 4H.02, paragraph 01, item B: "The provisions of Chapter 4D shall apply to traffic control signals for one-lane, two-way facilities, except that adequate means, such as interconnection, shall be provided to prevent conflicting signal indications, such as green and green, at opposite ends of the section."
- Section 6F.84, paragraph 05: "When temporary traffic control signals are used, conflict monitors typical of traditional traffic control signal operations should be used."
- Section 1A.13, paragraph 01, item B, which defines MUTCD "Guidance" as "a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate."

Paragraph 05 of Section 6F.84 and paragraph 01 of Section 4H.02, taken in context with the other provisions cited above, mean that a conflict monitor should be used with all temporary and portable traffic signals. The language gives highway agencies the flexibility to determine, based on an engineering study or engineering judgment regarding the particular conditions of a site or temporary traffic control zone, that the Section 4H.02 requirement for an "adequate means to prevent conflicting situations" can be satisfied by something other than a conflict monitor.

Some highway agencies have determined that, under some conditions, electronic means other than physical interconnection and conflict monitor(s) provides an adequate means to prevent conflicting displays as Section 4H.02 requires. Some highway agencies have also determined that, in the case of temporary or portable traffic signals that are manually operated by an on-site flagger, the ability of the flagger to intervene if a malfunction occurs is adequate to prevent conflicting indications. In any event, it is incumbent on the highway agency, not the manufacturer or supplier, to make determinations such as these and to be able to defend their engineering reasons in the event a tort liability case arises at a particular site.

Thank you for writing on this subject. Please note that we have assigned your request the following official interpretation number and title: 4(09)-10 (I) – Conflict Monitoring of Temporary and Portable Signals." Please refer to this number in any future correspondence regarding this issue.

Sincerely yours,

Mark R. Kehrli

Director, Office of Transportation

Operations