# **QPL 30 PORTABLE CHANGEABLE MESSAGE SIGNS**

## PORTABLE CHANGEABLE MESSAGE SIGNS

## **PROCEDURES**

#### **GENERAL**

This procedure outlines the Department's approval process for the use of Portable Changeable Message Signs (PCMS) used to assist in the handling of traffic in work zones.

### **SPECIFICATIONS**

Manual on Uniform Traffic Control Devices (MUTCD)

### **EVALUATION PROCEDURES**

A completed Product Evaluation Form, MSDS sheets, if applicable and product data information must be submitted to the Division of Materials and Tests.

The Tennessee Department of Transportation utilizes National Transportation Product Evaluation Program data for approval of PCMS. All PCMS shall have completed a full evaluation cycle (1-year) by the NTPEP. Upon conclusion of the full evaluation cycle, the prospective producer or vendor must provide complete data on the unit evaluated from the test decks to the Division of Materials and Tests. All units meeting the following minimum requirements based on NTPEP data will be placed on the Department's Qualified Products List:

- 1) The control system must have a keyboard to allow programming of user defined messages.
- 2) The unit must have a primary and backup power source.
- 3) The unit must be capable of adjusting it's brightness from daylight to night time conditions.
- 4) The unit must pass the NTPEP durability test.
- 5) The unit must be capable displaying 3 lines of legend.
- 6) The unit must have a minimum reliability from it's primary power supply for a minimum of 14 days for solar units (5 days for diesel units) for both the winter and summer tests. Gasoline powered units are not allowed.
- 7) The unit must have a minimum visibility of 3000 feet for both day and night tests during both winter and summer seasons.
- 8) The unit must have a minimum legibility of 650 feet for both day and night tests during both winter and summer seasons.

## LIST 30: PORTABLE CHANGEABLE MESSAGE SIGNS (CONTINUED)

### **EVALUATION PROCEDURES (CONTINUED)**

In addition to the above the PCMS must be a self-contained unit including a control system with keyboard, primary and backup power source, mounting and transporting equipment (trailer mounted with all applicable lights and hardware) and a message sign panel whose bottom is capable of being raised a minimum of 7 feet above the roadway.

If the product meets all of the above requirements, it will be approved and added to the Department's Qualified Products List. The Department reserves the right to reject any product, which does not demonstrate satisfactory performance in any of the above tests. The Department also reserves the right to remove any product from the Qualified Products List that does not perform satisfactorily under real life traffic conditions.

NOTE: This procedure is considered tentative until approval by the Department's Specification Committee. Until sometime in the future to be determined to add products solely based on NTPEP evaluation, the Department will maintain this Qualified Products List based on this procedure. The Department currently utilizes Special Provisions in Contracts where PCMS are required. Products meeting approval under either of the above procedures will be acceptable for use on TDOT projects.