PART E SIGNALING AND FLAGGERS

WAC 296-155-305 Signaling and Flaggers.

Definition:

Flagger means a person who provides temporary traffic control.

For the purposes of this chapter, *MUTCD* means the Federal Highway Administration's Manual on Uniform Traffic Control as currently modified and adopted by the Washington State department of transportation.

- **Link:** For the current version of the MUTCD, see the department of transportation's website at <u>http://www.wsdot.wa.gov/biz/trafficoperations/mutcd.htm</u>.
- (1) General requirements for signaling and flaggers.
 - (a) Employers must first apply the requirements in this section. Then you must set up and use temporary traffic controls according to the guidelines and recommendations in Part VI of the MUTCD.
 - (b) Job site workers with specific traffic control responsibilities must be trained in traffic control techniques, device usage, and placement.

Note:

- You may purchase copies of the MUTCD by writing: US Government Printing Office Superintendent of Documents Mail Stop: SSOP Washington DC 20402-9328
- You may view and print a copy of the MUTCD at the following website <u>http://www.wsdot.wa.gov/biz/trafficoperations/mutcd.htm</u>.

(2) When to use flaggers.

- (a) Flaggers are to be used only when other reasonable traffic control methods will not adequately control traffic in the work zone.
- (b) If signs, signals, and barricades do not provide necessary protection from traffic at work zones and_construction sites on or adjacent to a highway or street, then you must use flaggers or other appropriate traffic controls.
- (3) Flagger signaling.
 - (a) Flagger signaling must be with sign paddles approved by WSDOT and conform to guidelines and recommendations of MUTCD.
 - (b) Sign paddles must comply with the requirements of the MUTCD.
 - (c) When flagging is done during periods of darkness, sign paddles must be retroreflective or illuminated in the same manner as signs.

- (d) During emergency situations, red flags, meeting the specifications of the MUTCD, may be used to draw a driver's attention to particularly hazardous conditions. In nonemergency situations, a red flag may be held in the flagger's free hand to supplement the use of a sign paddle.
- (4) Adequate warning of approaching vehicles. Employers must:
 - Position work zone flaggers so they are not exposed to traffic or equipment approaching them from behind.
 - If this is not possible, then the employer, responsible contractor, and/or project owner must develop and use a method to ensure that flaggers have adequate visual warning of traffic and equipment approaching from behind.

Note:

- The following are some optional examples of methods that may be used to adequately warn or protect flaggers:
 - Mount a mirror on the flagger's hard hat.
 - Use an observer.
 - Use "jersey" barriers.
- The department recognizes the importance of adequately trained flaggers and supports industry efforts to improve the quality of flagger training. However, training alone is not sufficient to comply with the statutory requirement of revising flagger safety standards to improve options available that ensure flagger safety and that flaggers have adequate visual warning of objects approaching from behind them.
- (5) High-visibility garments for flaggers.
 - (a) While flagging during daylight hours, a flagger must at least wear, as an outer garment:
 - A high-visibility safety garment designed according to Class 2 specifications in ANSI/ISEA 107-1999, American National Standard for High-Visibility Safety Apparel.
 - Consisting of at least 775 square inches of background material that are fluorescent yellow-green, fluorescent orange-red or fluorescent red in color; AND
 - 201 square inches of retroreflective material that encircles the torso and is placed to provide 360 degrees visibility around the flagger.
 - A high visibility hard hat that is white, yellow, yellow-green, orange or red in color.

Note: A high-visibility garment meets Class 2 specifications if the garment:

- Meets the requirements above; OR
- Has an ANSI "Class 2" label.

Definition:

For the purpose of this rule, *hours of darkness* means one-half hour before sunset to one-half hour after sunrise.

- (b) While flagging during hours of darkness, a flagger must at least wear, as an outer garment:
 - A high-visibility safety garment designed according to Class 2 specifications in ANSI/ISEA 107-1999.
 - Consisting of at least 775 square inches of background material that are fluorescent yellow-green, fluorescent orange-red or fluorescent red in color; AND
 - 201 square inches of retroreflective material that encircles the torso and is placed to provide 360 degrees visibility around the flagger.
 - White coveralls, or other coveralls or trousers that have retroreflective banding on the legs designed according to ANSI/ISEA 107-1999 standards.
 - When snow or fog limit visibility, pants, coveralls, or rain gear, meeting these additional requirements must be worn:
 - In a highly visible color;
 - With retroreflective banding on the legs;
 - Designed according to ANSI/ISEA 107-1999.
 - A high-visibility hard hat:
 - Marked with at least 12 square inches of retroreflective material applied to provide 360 degrees of visibility.
- *Note:* ANSI/ISEA 107-1999 is available by:
 - Purchasing copies of ANSI/ISEA 107-1999 by writing:
 - American National Standards Institute 11 West 42nd Street New York, NY 10036 OR
 - Contacting the ANSI website at http://web.ansi.org/.
 OR
 - Reading a copy of ANSI/ISEA 107-1999 at any Washington state library.
- (6) Flagger training. Employers must make sure that:
 - (a) Each flagger has in their possession:
 - A valid Washington traffic control flagger card; or
 - A valid flagger card from a state such as:
 - Oregon;
 - Idaho;
 - Montana;
 - OR
 - Other states having a flagger training reciprocity agreement with Washington.

- (b) The flagger card shows the following:
- Verification that the flagger training required is completed;
- Date the flagger received their flagger training;
- Name of the instructor providing the flagger training;
- Name of the state that issued the flagger card;
- The card's expiration date, not to exceed three years from the date of issuance; AND
- The flagger's picture or a statement that says "valid with photo ID."
- (c) Flagger training is based upon the MUTCD.
- *Exemption:* Personnel that have not completed a flagger-training course may be assigned duties as flaggers only during emergencies. Emergency assignments are temporary and last only until a certified flagger can be put into the position.

Definition:

For the purpose of this rule, *emergency* means an unforeseen occurrence endangering life, limb, or property.

- (7) Flagger orientation and traffic control plan.
 - (a) The employer, responsible contractor or project owner must conduct an orientation that familiarizes the flagger with the job site. This requirement applies each time the flagger is assigned to a new project or when job site conditions change significantly.

The orientation must include, but is not limited to:

- The flagger's role and location on the job site;
- Motor vehicle and equipment in operation at the site;
- Job site traffic patterns;
- Communications and signals to be used between flaggers and equipment operators;
- On-foot escape route;
 - AND
- Other hazards specific to the job site.
- (b) If flaggers are used on a job that will last more than one day, then the employer, responsible contractor and/or project owner must keep on-site, a current site specific traffic control plan. The purpose of this plan is to help move traffic through or around the construction zone in a way that protects the safety of the traveling public, pedestrians and workers.

The plan must include, but is not limited to, the following items when they are appropriate:

- Sign use and placement;
- Application and removal of pavement markings;
- Construction;
- Scheduling;
- Methods and devices for delineation and channelization;
- Placement and maintenance of devices;
- Placement of flaggers;
- Roadway lighting;

- Traffic regulations; AND
- Surveillance and inspection.
- (8) Advance warning signs.
 - (a) Employers must provide the following on all flagging operations:
 - A three sign advance warning sequence on all roadways with a speed limit below 45 mph.
 - A four sign advance warning sequence on all roadways with a 45 mph or higher speed limit.
 - (b) Warning signs must reflect the actual condition of the work zone. When not in use, warning signs must either be taken down or covered.
 - (c) Employers must make sure to follow Table 1 for spacing of advance warning sign placement.

Table 1. Advanced Warning Sign Spacing						
Road Type	Speed	Distances Between Advance Warning Signs.*				
		A.**	B.**	C.**	D.**	
Freeways &	70	1,500 ft+/- or	1,500 ft+/- or	1,500 ft+/- or	1,500 ft+/- or	
Expressways		per the MUTCD.	per the MUTCD.	per the MUTCD.	per the MUTCD.	
	55					
Rural Highways	65	800 ft+/-	800 ft+/-	800 ft+/-	800 ft+/-	
	60					
Rural Roads	55	500 ft+/-	500 ft+/-	500 ft+/-	500 ft+/-	
	45					
Rural Roads and Urban Arterials	40	350 ft+/-	350 ft+/-	350 ft+/-	N/A	
	35					
Rural Roads, Urban	30	200 ft.***	200 ft.***	200 ft.***	N/A	
Streets, Residential						
Business Districts	25					
	23					
Urban Streets	25	100 ft.***	100 ft.***	100 ft.***	N/A	
	or less					

* All spacing may be adjusted to accommodate interchange ramps, at-grade intersections, and driveways.

** This refers to the distance between advance warning signs. See Figure 1, Typical Lane Closure on Two-Lane Road. This situation is typical for roadways with speed limits less than 45 mph.

*** This spacing may be reduced in urban areas to fit roadway conditions.

Exemption: In a mobile flagging operation, as defined by the MUTCD when the flagger is moving with the operation, the "flagger ahead (symbol or text)" sign must be:

- Within 1,500 feet of the flagger; AND
- The flagger station must be seen from the sign.

If terrain does not allow a motorist to see the flagger from the "flagger ahead" sign, the distance between the flagger and the sign must be shortened to allow visual contact, but in no case can the distance be less than the distance specified in Table 1, Advanced Warning Sign Spacing.

FIGURE 1



- (9) Providing a safe job site for flaggers. Employers, responsible contractors and/or project owners must make sure that:
 - (a) Flagger stations are located far enough in advance of the work space so that the approaching road users will have sufficient distance to stop before entering the work space. Follow Table 2 for the distance of the flagger workstation in advance of the work space.

Table 2. Distance of Flagger Station in Advance of the Work Space				
Speed* (mph)	Distance (ft)**			
20	35			
25	55			
30	85			
35	120			
40	170			
45	220			
50	280			
55	335			
60	415			
65	485			

Posted speed, off-peak 85th-percentile speed prior to work starting or the anticipated operating speed.
 This spacing may be reduced to fit roadway and worksite conditions. Distances greater than those listed in the table are acceptable.

(b) Flaggers stand either on the shoulder adjacent to the road user being controlled or in the closed lane prior to stopping road users. A flagger must only stand in the lane being used by moving road users after road users have stopped.

Definition:

Road user means a vehicle operator, bicyclist, or pedestrian within a public roadway, including workers in temporary traffic control zones.

- (c) Flagger workstations are illuminated during hours of darkness by floodlights that do not create glare that poses a hazard for drivers.
- *Note:* To identify potential glare, observe the lighted area from various directions and angles on the main roadway after initial floodlight setup.
- *Exemption:* Emergency situations are exempt from these illumination requirements. For the purpose of this rule, *emergency* means an unforeseen occurrence endangering life, limb, or property.
 - (d) Flaggers are not assigned other duties while engaged in flagging activities.
 - (e) Flaggers do not use devices that may distract the flagger's vision, hearing, or attention.
 - Examples of these devices include cell phones, pagers, radios, and headphones.
 - Devices such as two-way radios used for communications between flaggers to direct traffic or ensure flagger safety are acceptable.
 - (f) Flaggers receive a rest period of at least ten minutes, on the employer's time, for each four hours of working time.
 - Rest periods must be scheduled as near as possible to the midpoint of the work period.
 - A flagger must not be allowed to work more than three hours without a rest period.

Exemption: Scheduled rest periods are not required where the nature of the work allows a flagger to take intermittent rest periods equivalent to ten minutes for each four hours worked.

Interfailed 124/07, effective 0401/06. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 07-03-163 (Order 06-30), § 296-155-305, filed 01/24/07, effective 04/01/07. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-05-027 (Order 05-45), § 296-155-305, filed 02/07/06, effective 04/01/06. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-24-089 (Order 04-02), § 296-155-305, filed 02/07/06, effective 01/01/05.] Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. 03-06-076 (Order 02-35), § 296-155-305, filed 03/04/03, effective 08/01/03. Statutory Authority: RCW 49.17.010, .040, .050; Chapter 239, Laws of 2000 (ESHB 2647); and Chapter 34.05 RCW. 01-04-015 (Order 00-03), § 296-155-305, filed 01/26/01, effective 02/28/01. Statutory Authority: RCW 49.17.010, .040, .050. 00-12-018 (Order 00-03), § 296-155-305, filed 05/26/00, effective 05/26/00. Statutory Authority: Chapter 49.17 RCW. 93-19-142 (Order 93-04), § 296-155-305, filed 9/22/93, effective 11/1/93; 93-01-067 (Order 92-15), § 296-155-305, filed 12/11/92, effective 11/15/93; 89-11-035 (Order 89-03), § 296-155-305, filed 5/15/89, effective 6/30/89. Statutory Authority: RCW 49.17.040 and 49.17.050. 86-03-074 (Order 86-14), § 296-155-305, filed 1/21/86; Order 76-6, § 296-155-305, filed 3/1/76; Order 74-26, § 296-155-305, filed 5/7/74, effective 6/6/74.]

WAC 296-155-310 Barricades. Employers must make sure that barricades used for the protection of employees meet the requirements of Part VI of the MUTCD.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-24-089 (Order 04-02), § 296-155-310, filed 12/01/04, effective 01/01/05.] Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. 03-06-076 (Order 02-35), § 296-155-310, filed 03/04/03, effective 08/01/03. Statutory Authority: Chapter 49.17 RCW. 93-19-142 (Order 93-04), § 296-155-310, filed 9/22/93, effective 11/1/93; Order 74-26, § 296-155-310, filed 5/7/74, effective 6/6/74.]

WAC 296-155-315 Definitions applicable to this part.

- (1) **"Barricade"** means an obstruction to deter the passage of persons or vehicles.
- (2) **"Signs"** are the warnings of hazard, temporarily or permanently affixed or placed, at locations where hazards exist.
- (3) **"Signals"** are moving signs, provided by workers, such as flaggers, or by devices, such as flashing lights, to warn of possible or existing hazards.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-24-089 (Order 04-02), § 296-155-315, filed 12/01/04, effective 01/01/05.] Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. 03-06-076 (Order 02-35), § 296-155-315, filed 03/04/03, effective 08/01/03. Statutory Authority: Chapter 49.17 RCW. 94-15-096 (Order 94-07), § 296-155-315, filed 7/20/94, effective 9/20/94; Order 76-6, § 296-155-315, filed 3/1/76.]