WAC 468-240-195 Obstruction lighting standards—Prominent buildings and similar extensive obstructions. (1) Prominent buildings and similar extensive obstructions should be lighted in accordance with the following specifications. In the event the individual objects of a group of obstructions are approximately the same over-all height above ground, or water if so situated, and are located not more than 150 feet apart, the group of obstructions may be considered an extensive obstruction and so lighted.

(2) **Specification "E-1."** When the particular obstruction is not more than 150 feet in over-all height above ground, or water if so situated.

(a) If the obstruction is not more than 150 feet in either horizontal dimension, there should be installed at approximately the highest point or edge at each end of the major axis of the obstruction at least one light, consisting of a lamp of at least 100 watts, enclosed in an aviation red obstruction light globe. These lights should be positioned so as to insure unobstructed visibility of them from aircraft at any normal angle of approach, and to indicate the general extent of the obstruction; or, if the shape of the obstruction is such as to make this manner of lighting impracticable, there may be installed two such lights at the approximate center of the highest point or edge of the obstruction. Both lights should burn simultaneously and be so positioned as to insure unobstructed visibility of at least one of the lights from aircraft at any normal angle of approach.

(b) If the obstruction is more than 150 feet in one horizontal dimension, but not more than 150 feet in the other, there should be installed at least one light, consisting of a lamp of at least 100 watts enclosed in an aviation red obstruction light globe, for each 150 feet, or fraction thereof, or the over-all length of the major axis of the obstruction. At least one of these top lights should be installed on the highest point or edge of each end of the obstruction, with the additional lights as required spaced at approximately equal intervals not exceeding 150 feet, on the highest points or edge between the end lights in a manner to indicate the extent of the obstruction and to insure unobstructed visibility of the lights from aircraft at any normal angle of approach. If there are two or more edges of the same height on such an obstruction located near a landing area, the edge nearest the landing area should be lighted.

(c) If the obstruction is more than 150 feet in both horizontal dimensions, there should be installed at least one light, consisting of a lamp of at least 100 watts enclosed in an aviation red obstruction light globe, on the highest point of each corner of the obstruction. In addition, there should be installed at least one similar light for each 150 feet, or fraction thereof, [if] the distance between the corner lights exceeds 150 feet. These additional lights should be installed at approximately equal intervals, at the highest points along the outer edges of the obstruction, between the corner lights in a manner to indicate the general extent and definition of the obstruction and to insure unobstructed visibility of the lights from aircraft at any normal angle of approach.

(d) In the event there are one or more points within the outer edges of the obstruction, the uppermost parts of which are higher than the highest level of the lights hereinbefore prescribed, at least one similar light should be displayed from the top of each such point.

(2) **Specification "E-2."** When the particular obstruction is more than 150 feet in over-all height above ground, or water if so situated.

(a) Top lights should be installed on the obstruction in the manner set forth in the applicable provisions of Specification "E-1."

(b) In addition to the required top lights, intermediate lights, each consisting of a lamp of at least 100 watts enclosed in an aviation red obstruction light globe, should be provided for each 150 feet, or fraction thereof, [if] the obstruction exceeds 150 feet in over-all height above ground, or water if so situated. The position of these intermediate lights on the vertical plane should be at as close to equidistant levels between the top lights and the ground level as the particular shape and type of obstruction will permit. One such light should be installed at each outside corner of the obstruction at each level and also one such light should be installed at equal intervals on the horizontal plane on each outer surface at each level between adjacent corner lights, for each 150 feet, or fraction thereof, [if] the over-all horizontal distance between such adjacent corner lights exceeds 150 feet.

Note: In lieu of installing the obstruction lights on the obstructions, a pole or poles of a height slightly greater than the over-all height of the obstruction may be installed thereto and lighted in accordance with the specifications hereinbefore prescribed for individual towers, poles, or similar obstructions of a corresponding over-all height. It is important that those towers, poles, or similar structures be installed in such a manner as to indicate the general definition and extent of the obstruction.

(3) In the event early or special warning is considered necessary to provide adequate protection for aircraft, the top lights on each obstruction as required under Specifications "E-1" and "E-2" should be replaced with one or more flashing 300 mm electric code beacons, each beacon equipped with two lamps and aviation red color filters. The two lamps of each beacon should burn simultaneously and each should be at least 500 watts.

(4) Where obstructions are extensive as in the case of a line of trees or hills, and the use of the fixed obstruction lights would be impracticable or inadequate, flashing or rotating hazard beacons may be used as an alternate to the fixed obstruction lights. Such beacons should be located on the highest points or edges of the extended obstruction at intervals not exceeding 3,000 feet, provided at least three beacons are placed on any one side or edge of the extensive obstruction to indicate a line of lights.

[Statutory Authority: Chapter 47.68 RCW. WSR 96-17-018 (Order 164), recodified as § 468-240-195, filed 8/13/96, effective 9/13/96; O.M.&L. standards (part), filed 9/13/61.]