- WAC 468-240-190 Obstruction lighting standards—Smokestacks and similar obstructions. Smokestacks and similar obstructions should be lighted in accordance with the following specifications:
- (1) In order to avoid the obscurant effect of the deposits generally in evidence from this type of structure, the top lights should be installed from 5 to 10 feet below the highest point of the structure. It is important that these lights be readily accessible to enable cleaning when necessary and to facilitate lamp replacements.
- (2) Smokestacks and similar obstructions may be floodlighted by fixed searchlight projectors installed at three or more equidistant points around the base of each such obstruction if the search light projectors will provide an average illumination of at least 15 candles at the top one-third of the obstruction.
- (3) **Specification "D-1."** When the particular obstruction is not more than 150 feet in over-all height above ground, or water if so situated.
- (a) There should be installed at a near top level of the obstruction three or more lights, each light consisting of a lamp of at least 100 watts, enclosed in aviation red obstruction light globes. These lights should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least two of the lights from aircraft at any normal angle of approach.
- (4) **Specification "D-2."** When the particular obstruction is more than 150 feet but not more than 300 feet in over-all height above ground, or water if so situated.
- (a) There should be installed at a near top level of the obstruction two 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. The beacons should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one beacon from aircraft at any normal angle of approach.
- (b) At approximately the mid point of the over-all height of the obstruction, there should be installed at least two lights, each light consisting of a lamp of at least 100 watts, enclosed in aviation red obstruction light globes. These lights should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one light from aircraft at any normal angle of approach.
- (5) **Specification "D-3."** When the particular obstruction is more than 300 feet but not more than 450 feet in over-all height above ground, or water if so situated.
- (a) There should be installed at a near top level of the obstruction two 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. The beacons should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one beacon from aircraft at any normal angle of approach.
- (b) On levels at approximately two-thirds and one-third of the over-all height of the obstruction, there should be installed on each level at least two lights, each light consisting of a lamp of at least 100 watts, enclosed in aviation red obstruction light globes. These lights should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one light from aircraft on any normal angle of approach.

- (6) **Specification "D-4."** When the particular obstruction is more than 450 feet but not more than 600 feet in over-all height above ground, or water if so situated.
- (a) There should be installed at a near top level of the obstruction two 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. The beacons should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one beacon from aircraft at any normal angle of approach.
- (b) At approximately one-half of the over-all height of the structure, two or more similar flashing 300 mm electric code beacons should be installed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one beacon from aircraft at any normal angle of approach.
- (c) On levels of approximately three-fourths and one-fourth of the over-all height of the structure, there should be installed on each level at least three lights, each light consisting of a lamp of at least 100 watts, enclosed in aviation red obstruction light globes. These lights should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least two lights on each level from aircraft at any normal angle of approach.
- (7) **Specification "D-5."** When the particular obstruction is more than 600 feet but not more than 750 feet in over-all height above ground, or water if so situated.
- (a) There should be installed at a near top level of the obstruction two 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 should be at least 500 watts. The beacons should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one beacon from aircraft at any normal angle of approach.
- (b) At approximately two-fifths of the over-all height of the obstruction, two or more similar flashing 300 mm electric code beacons should be installed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one beacon from aircraft at any normal angle of approach.
- (c) On levels of approximately four-fifths, three-fifths and one-fifth of the over-all height of the obstruction, there should be installed on each level at least three lights, each light consisting of a lamp of at least 100 watts, enclosed in aviation red obstruction light globes. These lights should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least two lights on each level from aircraft at any normal angle of approach.
- (8) **Specification "D-6."** When the particular obstruction is more than 750 feet but not more than 900 feet in over-all height above ground, or water if so situated.
- (a) There should be installed at a near top level of the obstruction two 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. The beacons should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one beacon from aircraft at any normal angle of approach.
- (b) At approximately two-thirds and at approximately one-third of the over-all height of the obstruction two or more similar flashing

- 300 mm electric code beacons should be installed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least one beacon from aircraft at any normal angle of approach.
- (c) On levels of at approximately five-sixths, one-half and onesixth of the over-all height of the obstruction, there should be installed at least three lights, each light consisting of a lamp of at least 100 watts, enclosed in aviation red obstruction light globes. These lights should be placed at regular intervals on the horizontal plane in a manner to insure unobstructed visibility of at least two lights on each level from aircraft at any normal angle of approach.
- (9) **Specification "D-7."** Smokestacks and similar obstructions which are more than 900 feet in over-all height above ground, or water if so situated, will be given special aeronautical study to determine the proper manner in which to obstruction light them to provide adequate protection for air commerce.

[Statutory Authority: Chapter 47.68 RCW. WSR 96-17-018 (Order 164), recodified as § 468-240-190, filed 8/13/96, effective 9/13/96; O.M.&L. standards (part), filed 9/13/61.]