Chapter E 515

BULK-STORAGE PLANTS

E 515.01	Definition Hazardous areas Wiring and equipment within hazardous areas Wiring and equipment above hazardous areas	E 515.05	Underground wiring
E 515.02		E 515.06	Sealing
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E 515.01 Definition. This designation shall include locations where gasoline or other volatile flammable liquids are stored in tanks having an aggregate capacity of one carload or more, and from which such products are distributed (usually by tank truck).

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.

E 515.02 Hazardous areas. (1) Loading racks or platforms and rooms containing pumps for volatile flammable liquids or in which are located valves in pipe lines handling such liquids under pressure shall be considered to be class I, division 1 locations.

- (2) Rooms in which volatile flammable liquids are transferred to individual containers shall be considered to be class I, division 1 locations
- (3) In outdoor locations, areas adjacent to loading racks or platforms, or to aboveground tanks shall be considered to be class I, division 2 locations. Such areas shall be considered to extend 25 feet horizontally from such racks or tanks, and upward from adjacent ground level to a height of 15 feet.

Note: Open conductors shall not pass over flammable liquids storage tanks. Such conductors operating at more than 300 volts to ground shall be kept at least 15 feet horizontally from such tanks. When the voltage is 300 or below a horizontal clearance of not less than 8 feet shall be maintained.

- (4) Basements, pits or depressions which are within 25 feet of aboveground tanks, within 25 feet and below the level of the top of underground tanks, or within 25 feet of any loading rack or platform shall be considered to be class I, division 2 locations.
- (5) Storage and repair garages for tank trucks shall be considered to be class I, division 2 locations without limitation with respect to height above floor level.
- (6) Office buildings, boiler rooms and other similar locations which are outside the limits of hazardous areas as defined herein, and which are not used for handling or storage of volatile flammable liquids or containers for such liquids, shall not be considered to be hazardous locations.

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.

E 515.03 Wiring and equipment within hazardous areas. All electrical wiring and equipment within the hazardous areas defined in section E 515.02 shall conform to applicable provisions of chapter E 501.

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.

E 515.04 Wiring and equipment above hazardous areas. All fixed wiring above hazardous areas shall be in metallic raceways. Fixed equipment which may produce arcs, sparks or particles of hot metal, such as lamps and lampholders for fixed lighting, cutouts, switches, receptacles, motors, or other equipment having make and break or sliding contacts, shall be of totally-enclosed type or shall be provided with suitable guards or screens to prevent escape of sparks or hot metal particles. Portable lamps or appliances, and their flexible cords shall conform to the provisions of chapter E 501 for the class of location above which they are connected or used.

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.

E 515.05 Underground wiring. (1) Underground wiring shall be installed in rigid metal conduit, or, where buried under not less than 2 feet of earth, may be installed in non-metallic conduit or duct or in the form of cable approved for the purpose. Where cable is used, it shall be enclosed in rigid metal conduit from the point of lowest buried cable level to the point of connection to the aboveground raceway.

- (2) Conductor insulation shall conform to section E 501.13 of chapter E 501.
- (3) Where cable with non-metallic sheath or non-metallic conduit is used, an additional grounding conductor shall be included to provide for metallic continuity of the raceway system and for grounding of non-current-carrying metallic parts of equipment.

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.

E 515.06 Sealing. Approved seals shall be provided in conformance with section E 501.05 and subsections E 501.05 (1) (c) and E 501.05 (2) (b) shall apply to horizontal as well as to vertical boundaries of the defined hazardous areas. Buried raceways under defined hazardous areas shall be considered to be within such areas.

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.

E 515.07 Gasoline dispensing. Where gasoline dispensing is carried on in conjunction with bulk station operations, applicable provisions of chapter E 514 shall apply.

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.

E 515.08 Grounding. All metallic raceways, and all non-current-carrying metallic portions of electrical equipment shall be grounded as provided in chapter E 250.

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.