more from, dock sections that support a fuel dispenser(s) shall be permitted to be Class I, Division 2 locations where documented air space is provided between dock sections to allow flammable liquids or vapors to dissipate without traveling to such dock sections. The documentation shall comply with the requirements of 500.4.

Exception No. 2: Dock, pier, or wharf sections that do not support fuel dispensers and do not directly abut sections that support fuel dispensers shall be permitted to be unclassified where documented air space is provided and where flammable liquids or vapors cannot travel to such dock sections. The documentation shall comply with the requirements of 500.4.

(b) *Open Construction.* Where the construction of piers, wharfs, or docks is open, as in the case of decks built on stringers supported by pilings, floats, pontoons, or similar construction, the following shall apply:

(1) The area 450 mm (18 in.) above the surface of the dock, pier, or wharf and extending 6.0 m (20 ft) horizontally in all directions from the outside edge of the dispenser and down to the water level shall be a Class 1, Division 2 location.
(2) Enclosures such as tubs, voids, pits, vaults, boxes, depressions, piping chases, or similar spaces where flammable liquids or vapors can accumulate within 6.0 m (20 ft) of the dispenser shall be a Class I, Division 1 location.

Δ **514.4 Wiring and Equipment Installed in Hazardous (Classified) Locations.** All electrical equipment and wiring installed in the hazardous (classified) locations specified in 514.3 shall comply with Parts II and III of Article 501. Conductor insulation in these locations shall comply with 501.20.

The applicable wiring methods and equipment in Article 501 must be used within the Class I areas at a motor fuel dispensing facility. An explosionproof junction box of the type frequently used in gasoline dispensing units is shown in Exhibit 514.2. The branch-circuit conductors for dispenser power, lighting, or both connect to the internal wiring of the dispenser in the explosionproof junction box.

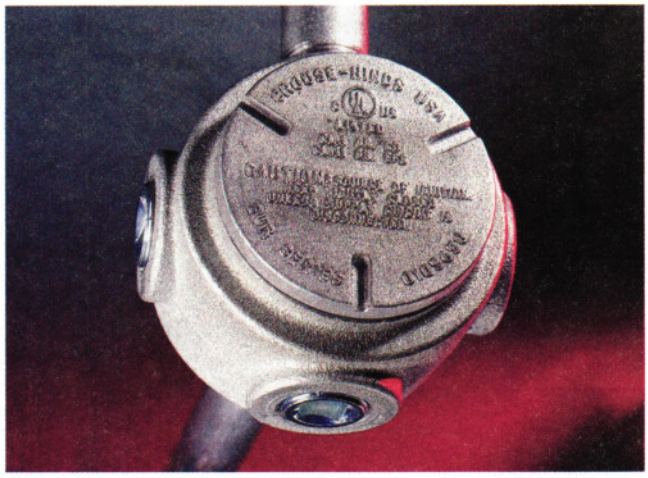

EXHIBIT 514.2 A typical explosionproof junction box used in a dispenser application. *(Courtesy of Eaton, Crouse-Hinds Division)*

514.7 Wiring and Equipment Above Hazardous (Classified) Locations. Fixed wiring and equipment above hazardous (classified) locations shall be installed in accordance with 514.3 and shall be one or more of the following:

(1) Rigid metal conduit (RMC) or intermediate metal conduit (IMC) with listed threaded or threadless fittings, or electrical metallic tubing (EMT) with listed fittings.
(2) Rigid polyvinyl chloride conduit (PVC), reinforced thermosetting resin conduit (RTRC), or electrical nonmetallic tubing (ENT).
(3) Flexible metal conduit (FMC), liquidtight flexible metal conduit (LFMC), or liquidtight flexible nonmetallic conduit (LFNC), with listed fittings.
(4) Type MC cable, Type AC cable, Type TC cable, or Type TC-ER cable, including installation in cable trays, with listed fittings. Type TC-ER cable shall include an equipment grounding conductor (EGC) in addition to any drain wire.
(5) Type MI cable terminated with listed fittings and supported to avoid tensile stress.
(6) Manufactured wiring systems.
(7) Type PLTC cable or Type PLTC-ER cable used in Class 2 or Class 3 circuits. Type PLTC-ER cable shall include an equipment grounding conductor (EGC) in addition to any drain wire.
(8) Type ITC cable or ITC-ER cable in accordance with 335.4 and 335.5 and terminated with listed fittings. Type ITC-ER cable shall include an equipment grounding conductor (EGC) in addition to any drain wire.
(9) Cellular metal floor raceways or cellular concrete floor raceways only for supplying ceiling outlets or extensions to the area below the floor. Such raceways shall have no connections leading into or through any Class I location above the floor.

Δ **514.8 Underground Wiring.** All underground wiring shall comply with 514.8(A), (B), or (C).

If fuel spilled in the vicinity of gasoline dispensers seeps into the ground, it could migrate into underground electrical conduits. Therefore, all conduits installed below the hazardous locations of a motor fuel dispensing facility are required to be sealed within 10 feet of the point of emergence from below grade. This boundary seal minimizes the passage of gasoline or other fuel vapors into unclassified locations where the electrical equipment is not explosionproof or otherwise protected. Tables 514.3(B)(1) and (B)(2) define the extent of the aboveground Class I, Divisions 1 and 2 locations.

N **(A) Metal Conduit.** Threaded rigid metal conduit (RMC) or threaded intermediate metal conduit (IMC) with listed threaded