fittings shall be permitted. Any portion of electrical wiring that is below the surface of a Class I, Division 1 or Division 2 location [as classified in Table 514.3(B)(1) and Table 514.3(B)(2)] shall be sealed within 3.05 m (10 ft) of the point of emergence above grade. The conduit shall not contain any unions, couplings, boxes, or fittings between the conduit seal and the point of emergence above grade.

N **(B) Type MI Cable.** Type MI cable shall be permitted where it is installed in accordance with Part II of Article 332.

N **(C) Nonmetallic Conduit.** Rigid polyvinyl chloride conduit (PVC), reinforced thermosetting resin conduit (RTRC), or high-density polyethylene conduit (HDPE) shall be permitted where buried under not less than 600 mm (2 ft) of cover. Where PVC conduit, RTRC conduit, or HDPE conduit is used, threaded rigid metal conduit (RMC) or threaded intermediate metal conduit (IMC) shall be used for the last 600 mm (2 ft) of the underground run to emergence or to the point of connection to the aboveground raceway. An equipment grounding conductor (EGC) shall be included to provide electrical continuity of the raceway system and for grounding of non–current-carrying metal parts.

Where polyvinyl chloride conduit (PVC), reinforced thermosetting resin conduit (RTRC), or high-density polyethylene (HDPE) conduit is used for underground wiring, threaded rigid metal conduit or threaded steel intermediate metal conduit must be used for the last 2 feet of the underground run to the point of emergence or to the point of connection to the aboveground raceway. These rigid nonmetallic conduits, including any nonmetallic conduit elbows and fittings, must be located not less than 2 feet below grade, as shown in Exhibit 514.3.

If rigid nonmetallic conduit is used, an equipment grounding conductor (EGC) must be included and must be bonded to the explosionproof raceway system that is installed inside the dispenser. Installation is accomplished by terminating the EGC on the ground screw (or other means) provided in the dispenser junction box.

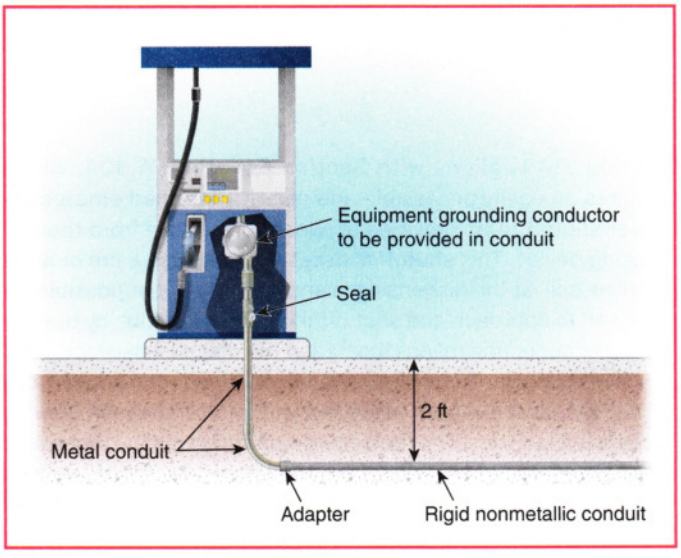

EXHIBIT 514.3 Use of rigid nonmetallic conduit in accordance with 514.8(C).

514.9 Sealing.

(A) At Dispenser. A listed seal shall be provided in each conduit run entering or leaving a dispenser or any cavities or enclosures in direct communication therewith. The sealing fitting or listed explosionproof reducer at the seal shall be the first fitting after the conduit emerges from the earth or concrete.

(B) At Boundary. Additional seals shall be provided in accordance with 501.15. Sections 501.15(A)(4) and (B)(2) shall apply to horizontal as well as to vertical boundaries of the defined Class I locations.

Seal fittings are required in all conduits entering or leaving a dispenser and leaving a Class I location. Even though a conduit runs from dispenser to dispenser and does not leave the hazardous location, seals are necessary where the conduit enters each dispenser. Conduits passing under the boundaries of the hazardous locations (20-foot radius from dispenser, 10-foot radius from a loose-fill tank connection, and 5-foot radius from a tight-fill tank connection) are considered to be in a Class I location, and the seal is to be the first fitting at the point of emergence.

Panelboards generally are located in a room or area that is an unclassified location; however, any conduit coming from the dispenser or passing under the hazardous location boundaries is required to be sealed at the panelboard location to minimize the likelihood of gas migration into the remote location. If the panelboard is located in the lube or repair room, all conduits emerging into the 18-inch hazardous location are required to be sealed. See Exhibits 514.4 and 514.5.

514.11 Circuit Disconnects.

Δ **(A) Emergency Electrical Disconnects.** Fuel dispensing systems shall be provided with one or more clearly identified emergency shutoff devices or electrical disconnects. Such devices or disconnects shall be installed in approved locations but not less than 6 m (20 ft) or more than 30 m (100 ft) from the fuel dispensing devices that they serve. Emergency shutoff devices or electrical disconnects shall disconnect power to all dispensing devices; to all remote pumps serving the dispensing devices; to all associated power, control, and signal circuits; and to all other electrical equipment in the hazardous (classified) locations surrounding the fuel dispensing devices. When more than one emergency shutoff device or electrical disconnect is provided, all devices shall be interconnected. Resetting from an emergency shutoff condition shall require manual intervention and the manner of resetting shall be approved by the authority having jurisdiction. [**30A:**6.7] The emergency shutoff device shall disconnect simultaneously from the source of supply, all conductors of the circuits, including the grounded conductor, if any. Equipment grounding conductors shall remain connected.