

# Memorandum

Date: Jan 13, 1995

Subject: INFORMATION: Sidewall fusion joints

From: Cesar De Leon, DPS-2

To: Richard Sanders, DTI-60

This responds to your memo of December 12, 1994, concerning the plastic pipe safety regulations in 49 CFR 192.283 and 192.285. You suggested we amend these regulations to require the use of a joining device in making a sidewall fusion joint. You are worried that sidewall fusion joints made by hand without a device to provide the proper pressure and set time will fail in the future.

We already have several regulations that provide for the safety of sidewall fusion joint: Under § 192.273, sidewall fusion joints must be designed and installed to sustain anticipated longitudinal pullout or thrust forces, must be made in accordance with written procedures that have been proven by test or experience to produce strong gas tight joints, and must be inspected to insure compliance with applicable Part 192 joining requirements. Section 192.281(a) provides that sidewall fusion joints may not be disturbed until properly set. Procedures for making sidewall fusion joints must be qualified by physical testing under § 192.283(a). And, under § 192.285, persons who make sidewall fusion joints must be qualified by training or experience in use of the joining procedure and by visual and physical testing of a sample sidewall fusion joint.

Although we share your concern that operators should use proper joining techniques for sidewall fusion joints, we believe the existing regulations are adequate to assure that proper techniques are used. Under those regulations, adequate joining procedures for hand held sidewall fusion joints would have to provide the hold time and pressure that have been proven necessary to make sound joints. Those procedures also would have to provide a way for the person making the joint to know that the correct pressure is being applied.

If a hand sidewall fusion joint is not held in place long enough and with enough pressure to set properly, the resulting joint would be an infraction of the joining procedures as well as §§ 192.273 and 192.281(a).

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