

**Regulatory Citation(s):**

**78.85. Cementing standards.**

(a) When cementing surface casing or coal protective casing, the operator shall use cement that meets or exceeds the ASTM International C 150, Type I, II, or III Standard or API Specification 10. The cement must also:

- (5) Prevent gas flow in the annulus. In areas of known shallow gas producing zones, gas block additives and low fluid loss slurries shall be used.

**Question:**

A well service company contacted the Department concerning the use of gas block additives and low fluid loss slurries to prevent annular flow in areas of known shallow gas producing zones. If the blend they use prevents annular flow without using "gas block" additives, is the mix design recognized as meeting the requirement? Is there a performance demonstration that must be executed to demonstrate that the blend meets this standard?

**Response:**

If the specific cement blend, or mix design, is formulated to prevent gas flow in the annulus, then in concept it could meet the substantive requirement of the referenced citation. However, information from the well service company that details how the blend accomplishes the gas blocking function should be requested.

There is currently no written "performance standard" to demonstrate that a specific blend meets this regulatory requirement, but in practice a performance standard would be known cement jobs where the blend was used and achieved surface returns while also successfully preventing the occurrence of annular flow attributable to the failure of the cement to prevent gas intrusion/cutting.