

Appendix A

Final Rule for Floodplains

Adopted 3/2/2015

600 SERIES - SERIES SAFETY REGULATIONS

603. STATEWIDE LOCATION REQUIREMENTS FOR OIL AND GAS FACILITIES, DRILLING, AND WELL SERVICING OPERATIONS

603.g. **Statewide equipment anchoring requirements.** All equipment at drilling and production sites in geological hazard ~~and floodplain~~ areas shall be anchored. ~~_-Anchors must be engineered to support the equipment and to the extent necessary_~~ to resist flotation, collapse, lateral movement, or subsidence. Anchoring requirements in Floodplains are governed by Rule 603.h.

603.h. Statewide Floodplain Requirements. When operating within a defined Floodplain:

(1) The following requirements apply to new Oil and Gas Locations and Wells:

- A. Effective August 1, 2015, Operators must notify the Director when a new proposed Oil and Gas Location is within a defined Floodplain, via the Form 2A.
- B. Effective June 1, 2015, new Wells must be equipped with remote shut-in capabilities prior to commencing production. Remote shut-in capabilities include, at a minimum, the ability to shut-in the well from outside the relevant Floodplain.
- C. Effective June 1, 2015, new Oil and Gas Locations must have secondary containment areas around Tanks constructed with a synthetic or geosynthetic liner that is mechanically connected to the steel ring or another engineered technology that provides equivalent protection from floodwaters and debris.

(2) The following requirements apply to both new and existing Wells, Tanks, separation equipment, containment berms, Production Pits, Special Purpose Pits, and flowback pits:

- A. Effective April 1, 2016, Operators must maintain a current inventory of all existing Wells, Tanks, and separation equipment in a defined Floodplain. Operators shall ensure that a list of all such Wells, Tanks, and separation equipment is filed with the Director. As part of this inventory, Operators must maintain a current and documented plan describing how Wells within a defined Floodplain will be timely shut-in. This plan must include what triggers will activate the plan and must be made available for inspection by the Director upon request.
- B. Effective June 1, 2015 for new and April 1, 2016 for existing, tanks, including partially buried tanks, and separation equipment must be anchored to the ground. Anchors must be engineered to support the Tank and separation equipment and to resist flotation, collapse, lateral movement, or subsidence.
- C. Effective June 1, 2015 for new and April 1, 2016 for existing, containment berms around all Tanks must be constructed of steel rings or another engineered technology that provides equivalent protection from floodwaters and debris.
- D. Effective June 1, 2015 for new and April 1, 2016 for existing, Production Pits, Special Purpose Pits (other than Emergency Pits), and flowback pits containing E&P waste shall not be allowed within a defined Floodplain without prior Director approval, pursuant to Rule 502.b.
- E. An Operator may seek a variance from the effective date for the requirements for existing facilities referenced in subparts 603.h(2)B, C or D by filing a request for an alternative compliance plan with the Director on or before February 1, 2016.

100 SERIES - DEFINITIONS

FLOODPLAIN shall mean any area of land officially declared to be in a 100 year floodplain by any Colorado Municipality, Colorado County, State Agency, or Federal Agency.