



Proposed Revision of Onshore Orders 4

May 2016

43 CFR Part 3170

Definitions, recordkeeping, bypass and tampering, variances, appeals, enforcement

Subpart 3173 (Onshore Order 3): Site security, FMP, Commingling, Off-lease measurement

Subpart 3174 (Onshore Order 4): Oil Measurement

Subpart 3175 (Onshore Order 5, Statewide NTLs for electronic flow computers): Gas Measurement

Why revise these Orders?

- Last revised in 1989
- Current orders do not address new technology or incorporate the latest industry standards & practices
- Gaps in existing orders that need to be addressed
- Need to respond to various reports and audits questioning adequacy of existing requirements:
 - RPC report (2007)
 - GAO audit (2010)
 - OIG audits

Why revise these Orders?

- Improve measurement accuracy, reporting, and accountability

3174 Proposed Revisions Oil Measurement

Order 4

- No overall performance standards

Proposed 3174

- Performance standards for uncertainty would be established:

3174 Proposed Uncertainty Requirements

If the monthly volume averaged over the previous 12 months or the life of the FMP, whichever is shorter, is:	The overall volume measurement uncertainty must be within:
Greater than 10,000 bbl/month	± 0.35 percent
Greater than 100 bbl/month and less than 10,000 bbl/month	± 1.0 percent
Less than 100 bbl/month	± 2.5 percent

3174 Proposed Revisions

Specific Data/Comment Requests

- Proposed Measurement Volume Uncertainty Levels
- Use of Automatic Tank Gauging Systems
- Composite Sampling Systems on a CMS
- Ways to Address Meter Factor Determinations with Variable Flow Rates, Pressures, or API Oil Gravities

3174 Proposed Revisions

Order 4

- References numerous industry standards published as of 1989

Proposed 3174

- Would Incorporate by reference the most current versions of 21 API standards and 2 ASTM standards

3174 Proposed Revisions

Order 4

- Includes requirements for gauging and sampling; however, no set procedure is specified

Proposed 3174

- Would specify the sequence of tank gauging and sampling in addition to requirements for each step

3174 Proposed Revisions

Order 4

- Requires two consecutive gauges within $\frac{1}{4}$ "

Proposed 3174

- Would require two consecutive identical gauges or three gauges within $\frac{1}{8}$ "

3174 Proposed Revisions

Order 4

- LACT systems require ATC/ATG
- Positive Displacement (PD) meter only

Proposed 3174

- ATC/ATG prohibited, must use temperature averager instead
- Allows Coriolis meter in lieu of PD meter

3174 Proposed Revisions

Order 4

- Measurement by tank gauge or LACT only

Proposed 3174

- Would also allow and define standards for stand-alone Coriolis Measurement Systems (CMS):