

Fact Sheet - 43 CFR 3175: GAS MEASUREMENT

October 17, 2016

43 CFR 3175 replaces Onshore Order 5 and establishes minimum standards for accurate measurement and proper reporting of all gas removed or sold from Federal and Indian leases (except Osage Tribe), units, unit participating areas, and areas subject to communitization agreements.

Overview of Final Rule

Like the proposed rule, the final rule: (i) addresses new gas meter technology; (ii) establishes requirements for the hardware and software used on metering equipment; (iii) specifies the requirements for recordkeeping and reporting; (iv) establishes overall measurement performance standards; and (v) includes a mechanism for the BLM to review, and approve for use, new gas measurement technology and systems on a nation-wide basis. Specifically, the final rule:

- Incorporates proven industry standards developed by gas measurement experts from industry and the BLM;
- Increases BLM's ability to account for the gas produced by ensuring that higher volume facilities, where erroneous measurement can have large financial implications, have more frequent equipment inspections and heating value determinations (or Btu content) and higher measurement accuracy in order to ensure produced gas is being properly accounted for and facilities are operating properly;
- Requires operators of the highest volume facilities to use updated measurement tools including electronic gas measurement systems, while making allowance for lower volume facilities to continue using existing technology; and,
- Updates regulations governing assessments and civil penalties to ensure those measures are aligned with the true cost of developing and overseeing a modern oil and gas well.

By updating its minimum standards for gas measurement, the final rule strengthens the BLM's production accountability program to reflect the considerable changes in technology and industry practices that have occurred in the 25 years since the current Order 5 was issued. It also supersedes various statewide Notices to Lessees that have been issued from time-to-time to provide additional guidance regarding compliance with the requirements of Order 5.

Principal Changes Between the Proposed and Final Rules

Based on comments, data received, and additional internal reviews, the BLM made a number of revisions to the proposed rule. The key areas receiving the most feedback were:

- 1) The thresholds between the flow categories;
- 2) Type testing of transducers, software, linear meters, and other equipment;
- 3) The lack of phase-in periods for the Production Measurement Team and data entry into the Gas Analysis Reporting and Verification System (GARVS);
- 4) The lack of grandfathering of meter tubes and software at existing meters;
- 5) The frequency of detailed meter tube inspections;
- 6) Display requirements for electronic gas measurement (EGM) systems;
- 7) The use of third party software;
- 8) The requirements with respect to sample probe placement;
- 9) The requirement to seal sample cylinders after cleaning;
- 10) The requirements relating to gas chromatograph use and verification;
- 11) The requirements relating to sampling frequency and composite sampling systems or online gas chromatographs; and
- 12) The requirement to take extended analyses if the mole percent of C₆₊ exceeds 0.25.

Based on the comments received, the BLM made changes to the final rule in each of these areas (other changes are addressed in the preamble to the final rule):

- In response to comments and based on current and projected market conditions, the BLM raised two of the three production level thresholds that operators will use to determine which requirements apply (§ 3175.10). In the final rule:
 - The threshold between the very-low-volume (“marginal-volume” in the proposed rule) category and the low-volume category was raised from 15 Mcf/day to 35 Mcf/day.
 - The threshold between the low-volume category and the high-volume category was raised from 100 Mcf/day to 200 Mcf/day.
- Adjusts the requirements for type testing transducers:
 - Instead of requiring the testing of all makes, models, and ranges of transducers under the testing protocol described as part of the rule, the final rule will allow operators to submit existing test data for makes, models, and ranges of transducers in use at facility measurement points (FMPs) (§ 3175.43(b)).
 - For new transducers that are subject to the testing protocol in the final rule, long-term stability testing is no longer required and testing may be done in-house as long as the testing facility meets the requirements of a qualified testing facility (§ 3175.131(a)).
- Allows the BLM to approve – through the Production Measurement Team – makes, models, and sizes of linear meters that have been type tested (§ 3175.48). The proposed rule would have required the BLM to approve these meters on a case-by-case basis.
- Provides 2 years to implement:
 - A requirement that operators begin using approved equipment listed on the BLM website (www.blm.gov) (§ 3175.60(a)(4) and (b)(2)(iii)).
 - The requirement that operators must enter all gas analyses into GARVS (§ 3175.60(a)(2) and (b)(2)(ii)).
- The final rules grandfathers:

- The meter tubes at low- and high-volume FMPs in place prior to the effective date of the rule from having to comply with the latest American Petroleum Institute (API) construction and length standards (§ 3175.61(a)); and
- Software at low- and very-low-volume FMPs in place prior to the effective date of the rule from having to meet the latest API calculation methodologies (§ 3175.61(b)).
- Adjusts the requirements pertaining to detailed meter tube inspections:
 - The final rule no longer requires detailed meter tube inspection on a set schedule. Instead, detailed meter tube inspections are required if a basic inspection reveals obstructions, pitting, or buildup of foreign substances (§ 3175.80(i)).
 - For low-volume FMPs, the detailed meter tube inspection requires the meter tube to be cleaned (§ 3175.80(i)).
- Requires that gauge lines have a nominal diameter of 3/8 inch, rather than an inside diameter of 3/8 inch (§ 3175.91(a)(1) and 3175.101(a)(1)).
- Eliminates the requirement in proposed rule that would have required the display on EGM systems to include the FMP number.
- Allows the use of third party software for reporting that is approved by the BLM through the PMT.
- The final rule adopts the API standard for the minimum distance downstream of the orifice plate (§ 3175.112(b)(1)).
- Removes the proposed requirement for sample cylinders to be sealed after cleaning. In its place, operators must provide the BLM with documentation that the sample cylinder was cleaned (§ 3175.113(c)(5)).
- The final rule makes several changes to the proposed requirements for gas chromatographs (GCs):
 - The gas used to verify a GC no longer has to be different from the gas used to calibrate.
 - Portable GCs no longer need to be verified 24 hours prior to sampling.
 - The inlet filters on portable GCs no longer need to be cleaned or replaced before sampling.
 - Samples no longer need to be analyzed until three consecutive runs are within the repeatability standards listed in Gas Processor's Association (GPA) standards.
 - The final rule increases the acceptable range of un-normalized mole percentages to 97 to 103 percent (§ 3175.118(b)).
- The BLM made several changes related to gas sampling frequency at high- and very-high-volume FMPs:
 - Fixes sampling frequencies initially for high- and very-high volume facilities:
 - At high-volume FMPs, the BLM will not change a facility's initial sampling frequency any sooner than 2 years after production begins or 4 years after the effective date, whichever is later (§ 3175.115(b)(1)(i)).

- At very-high volume FMPs, the BLM will not change a facility's initial sampling frequency any sooner than 1 year after production begins or 3 years after the effective date, whichever is later (§ 3175.115(b)(1)(ii)).
 - Reduces the most frequent sampling frequency possible under the rule to once every two weeks (§ 3175.115(b)(4)).
 - Composite sampling systems or on-line GCs will only be required at very-high-volume FMPs that cannot meet the rule's heating value uncertainty levels (§ 3175.115(b)(5)).
- Modifies the threshold at which an extended gas analysis is required from 0.25 mole percent in the proposed rule to 0.5 mole percent in the final rule. In addition, operators have the option of taking periodic extended analyses and applying those analyses to the standard C₆₊ analyses.

Compliance Costs

The BLM estimates that new subpart 3175 will cost the regulated community approximately \$23.3 million in one-time transition costs, or about \$6,300 per affected entity, phased in over the first 3 years. On an on-going annual basis, this rule will cost the regulated community about \$12.1 million or \$3,300 per entity. The BLM estimates that one-time compliance costs to be approximately \$9.6 million less than the proposed rule, and the ongoing, annual costs to be \$34 million less than the proposed rule.

Procedural History

- Published October 13, 2015 – 62-day comment period, closed Dec. 14, 2015.
- BLM held 3 public meetings (Dec. 1st, 3rd, and 8th) in 2015.
- The BLM received a total of 106 unique and detailed comment letters.