



December 14, 2015

**VIA ELECTRONIC FILING**

Director Neil Kornze  
U.S. Department of the Interior  
Bureau of Land Management  
Mail Stop 2134 LM  
1849 C Street, NW  
Washington, D.C. 20240

**Re: Docket No. BLM-2015-0004 (Onshore Order No. 4): Proposed Rule on Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Measurement of Oil; Federal Register Vol. 80, No. 189 (Wednesday, September 30, 2015); RIN 1004-AE16**

Dear Director Kornze:

The Gas Processors Association (GPA) appreciates the opportunity to submit comments on the Bureau of Land Management's (BLM) proposed rulemaking "Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Measurement of Oil," 80 Fed. Reg. 58952 (Sept. 30, 2015).

GPA has served the U.S. energy industry since 1921 as an incorporated non-profit trade association. GPA is composed of over 100 corporate members of all sizes that are engaged in the gathering and processing of natural gas into merchantable pipeline gas, commonly referred to in the industry as "midstream activities." Such processing includes the removal of impurities from the raw gas stream produced at the wellhead, as well as the extraction for sale of natural gas liquid products ("NGLs") such as ethane, propane, butane and natural gasoline. GPA members account for more than 90 percent of the NGLs produced in the United States from natural gas processing. Our members also operate hundreds of thousands of miles of domestic gas gathering lines and are involved with storing, transporting, and marketing natural gas and NGLs.

BLM's proposed rule is intended to replace Onshore Oil and Gas Order Number 4, Measurement of Oil with new regulations. Order 4 establishes minimum standards for the measurement of oil produced from Federal and Indian (except Osage Tribe) leases to ensure that production is accurately measured and accounted for. Order 4 was previously issued in 1989. Order 4 will have a direct impact on GPA members since they own and operate a large number of the covered Facility Measurement Points.

GPA requests that BLM withdraw the proposed rule at this time due to the negative impacts the proposed rule will have on the midstream sector. If BLM decides to go forward, we request

that BLM grandfather in companies whose measurement results are within BLM's desired overall performance. As the proposed rule is currently drafted, it would require affected parties to remove equipment that is functioning properly and measuring accurately. Changing equipment out because it was built to an older standard does not mean the measurement will give a different answer. Change for the sake of change with no improvement is wasteful, will pose unnecessary costs on the midstream sector, and will cause operational delays.

The order of our comments below does not necessarily reflect the relative importance to GPA members, rather the order reflects the organization of the proposed rule.

### **3174.2**

The rule requires existing equipment to be upgraded to meet the new requirements. This is an uncommon industry practice because the cost associated with the upgrade greatly outweighs the incremental improvement in accuracy. Instead, the rule should allow for grandfathering of existing equipment. The rule should include the following statement: "Equipment in service before [Effective Date of Rule] shall be held to the uncertainty, operational, and procedural guidelines of the relevant standards in force at the time of installation. Where a relevant standard was not in force at the time of installation, the first revision of the standard will be considered the standard in force. Any replacement of existing equipment, other than like-for-like, will require updating to the guidelines in the latest revision of the applicable standards."

**Economic Impact Statement for 3174.2:** Requiring existing equipment performing to established regulations, uncertainty guidelines, and industry standards to be upgraded to meet new regulations, uncertainty guidelines, and industry standards will have a significant economic impact on industry companies with limited improvement in uncertainty or accuracy.

### **3174.3(a)(1)**

The rule does not give guidance on how the uncertainty will be calculated. It also appears to specify that the FMP's average monthly flow be recalculated every month. This could potentially have some FMP's swinging back and forth between requirements on a month to month basis. Performing that calculation each month would be difficult for an operator of multiple FMP's to maintain. Upgrading existing site measurement equipment to meet tighter uncertainty levels could potentially be cost prohibitive for an incremental change in volume (going from 95 to 105 bbl/month requires significant improvement in uncertainty due to an insignificant increase in flow).

### **3174.3(b)**

The rule does not give guidance on how bias will be determined, or what it considers to be statistically significant. In order for this to be applied uniformly throughout the nation, this needs to be defined in the regulation.

### **3174.3(c)**

Verifiability does not take into account the difference between live calculations at high frequencies versus averaged and accumulated data over time. The independent calculations should only have to come within a statistically insignificant window. In order for this to be applied uniformly throughout the nation, this needs to be defined in the regulation.

### **3174.4**

Incorporating specific revisions of standards as part of the rule requires companies to install and maintain equipment to outdated practices and standards. The latest version of each applicable standard should be included by reference. The Production Measurement Team (PMT) should be involved in the working groups of the standards to maintain awareness of upcoming changes and to help direct the course of the standards. Including the latest version instead of a specific version would also prevent future reports by the Government Accountability Office (GAO) from finding that BLM "regulations do not reflect current industry-adopted measurement technologies and standards designed to improve oil and gas measurement" or that the BLM's regulations "hampers the agency's ability to have reasonable assurance that the oil and gas production is being measured accurately" and would likely keep the BLM's measurement rules off of the High Risk List.

**Economic Impact Statement for 3174.4:** Incorporating specific revisions of standards as part of the rule will impact companies by requiring knowledge of outdated standards as well as the current version. As standards are updated, the economic impact to an organization will grow. Once all of the standards have been updated, the cost of a company maintaining compliance simultaneously with the BLM and industry companies will be doubled.

### **3174.5**

The only tank gauging method that appears to be allowed is manual tank gauging. Manual tank gauging should be an acceptable method, but not the only acceptable method. Automated tank gauging provides for a safer method of determining tank level, specifically when the oil/vapor is sour or there is significant hydrocarbon vapor pressure on the tank. Automated tank gauging is also consistent with industry practice and allows for more accurate, objective tank level measurements. Including automated tank gauging, as supported by API MPMS 3.1B, would help prevent future reports by the Government Accountability Office (GAO) from finding that BLM "regulations do not reflect current industry-adopted measurement technologies and standards designed to improve oil and gas measurement" or that the BLM's regulations "hampers the agency's ability to have reasonable assurance that the oil and gas production is being measured accurately" and would likely keep the BLM's measurement rules off of the High Risk List.

### **3174.5(b)(3)**

If the oil is weathered or stabilized, there is no need for hatches and other connections to be vapor tight. This requirement should be limited to condensate, light hydrocarbon, and oil tanks with an RVP greater than 9.

**Economic Impact Statement for 3174.5(b)(3):** Requiring atmospheric tanks of 'dead' oil to be vapor tight is an unnecessary expense that will have a significant economic impact on industry companies with no added value to the industry, BLM, or the environment.

### **3174.5(b)(4)**

This requirement negates any improvement in measurement that may be seen from requiring tanks to be vapor tight.

### **3174.5(b)(6)**

If the tank is calibrated 'out of level' then it should be maintained at that condition. It may be cheaper to recalibrate an existing tank that is no longer level than to relevel a tank, with the

same result in accuracy. The requirement should be that the accuracy of the tank readings is maintained.

**3174.5(b)(7)**

This requirement should only be for tanks that are manually gauged.

**3174.5(c)(1)(ii)**

This requirement limits the accuracy of the tank level measurements as read by automated tank gauges. The incremental height measurement requirements should be 1/8th inch for manually gauged tanks, and equal to the precision of the automated tank gauge for tanks that utilize automated tank gauging per API MPMS 3.1B. Changing this calibration increment requirement will help prevent future reports by the Government Accountability Office (GAO) from finding that BLM "regulations do not reflect current industry-adopted measurement technologies and standards designed to improve oil and gas measurement" or that the BLM's regulations "hampers the agency's ability to have reasonable assurance that the oil and gas production is being measured accurately" and would likely keep the BLM's measurement rules off of the High Risk List.

**3174.6(b)(2)**

Temperature measurement doesn't allow for automated temperature readings and temperature averaging through the tank level, which is supported by industry standards. This requires operators to be on site for tank gauging.

**Economic Impact Statement 3174.6(b)(2):** Requiring operators to be on site for tank gauging, all at the end of the month is a significant cost to the industry. It requires each company to employ or contract enough personnel to be onsite at every tank at the same time each month.

**3174.6(b)(2)(i)**

Glass thermometers are not the only type of NIST traceable non-electronic thermometers in use in the industry. Change to 'non-electronic thermometers'.

**3174.6(b)(3)(i)-(iii)**

Sampling into a non-pressurized container negates any intended improvement from ensuring the tank is vapor tight. Sampling of hydrocarbon liquids with an RVP greater than 9 should be performed in pressurized containers or analysis should be performed by online units. All three analyses should be performed from a single sample mixed from all three points, or from a single composite sample taken from the flowing outlet stream while the tank is being unloaded. Requiring onsite analysis of the sample to determine API gravity and S&W limits the potential accuracy of those measurements, and subsequently the Net Standard Volume calculation accuracy. Determination of API gravity and S&W for custody purposes should be allowed to take place at an offsite laboratory, and the subsequent calculations and measurement ticket completed at an offsite facility, if desired by the operator.

**3174.6(b)(4)**

Requiring the use of a thermohydrometer for API gravity (density) measurement limits the use of new, automated, more accurate technology such as Coriolis meters and density gauges. Allowance should be made for other methods that can meet the uncertainty requirements of the regulation.

**3174.7(b) and 3174.9(c)**

Measurement tickets must be completed before conducting proving operations. Some LACT operations cut tickets only at month's end or when the meter is replaced.

**Economic Impact Statement for 3174.7(b) and 3174.9(c):** The cost of an additional ticket to be generated with each proving.

**3174.7(e)(1)**

The operator must notify the AO within 24 hours of any LACT system failures or equipment malfunctions which may have resulted in measurement error. This could require additional monitoring equipment if the expectation is to immediately diagnose a measurement error. Reporting within 7 days of discovering a failure that may have resulted in measurement error would likely avoid additional monitoring equipment while providing sufficient notice to BLM.

**3174.9**

Coriolis measurement systems (CMS) is a new section. The industry does not designate a PD meter LACT differently from a Coriolis meter LACT in that they are both LACT meters. The ancillary equipment for a Coriolis meter LACT is the same as in the LACT section. Combine PD and Coriolis meters into a single section.

**3174.10(f)**

Before proving the meter, or any time the AO requests it, the zero value stored in the meter using API 5.6.8.3 (incorporated by reference, see § 3174.4) must be verified by stopping the flow through the meter and then monitoring the indicated mass flow rate under this condition. The proving compensates for the zero error. Requiring flow through the meter to be stopped is an additional step that may disrupt normal operation.

**3174.10(g)**

This section for determination of net standard volume should be covered in 3174.12(b) for measurement tickets.

**3174.10(i)(2)(ii)**

For each CMS, the following values and corresponding units of measurement must be displayed: The instantaneous density of liquid (pounds/bbl). Some Coriolis meters do not have the option to display density in pounds per barrel. These meters can display in other units that can be simply converted to pounds per barrel.

**Economic Impact Statement for 3174.10(i)(2)(ii):** This may require custom firmware in the Coriolis transmitter or replacement of the Coriolis transmitter at additional cost and time to implement.

**3174.10(i)(4)**

A log must be maintained of all meter factors, zero verifications, and zero adjustments. For zero adjustments, the log must include the zero value before adjustment and the zero value after adjustment. This log must be located on-site and accessible to the AO.

**Economic Impact Statement for 3174.10(i)(4):** This imposes an additional time burden for the operator to meet the documentation and retention requirement.

**3174.10(j)(2)**

The configuration log must contain and identify all constant flow parameters used in generating the QTR. This may require a flow computer to be added to a Coriolis LACT. This exceeds the requirements placed on PD meter LACTs. This proposal also adds a documentation and retention requirement.

**3174.10(j)(3)**

The event log must be of sufficient capacity to record all events such that the operator can retain the information under the recordkeeping requirements. This may require a flow computer to be added to a Coriolis LACT. This exceeds the requirements placed on PD meter LACTs. This also adds a documentation and retention requirement.

**3174.10(j)(4)**

The type and duration of any of the following alarm conditions must be recorded: density deviations and flowing outside of maximum and minimum manufacturer's recommended flow rates. This may require a flow computer to be added to a Coriolis LACT. This exceeds the requirements placed on PD meter LACTs. This also adds a documentation and retention requirement.

**Economic Impact Statement for 3174.10(j)(2) - (4):** This may require replacement of the Coriolis transmitter and/or adding a flow computer. The documentation and retention requirement imposes an additional time burden for the operator.

**3174.11 (c) and 3174.11(d)**

If each proving run is not of sufficient volume to generate at least 10,000 pulses from the positive displacement meter in a LACT system or the Coriolis meter in a CMS, pulse interpolation must be used in accordance with API 4.6 (incorporated by reference, see § 3174.4). Small Volume Provers (SVP) should be noted. Their reference to API 14.6 Pulse Interpolation may be their approach to allowing SVP's.

**3174.11 (g, h, i)**

These sections required the verification/calibration of temperature, pressure, and density transmitters during each meter proving. With the high quality of today's transmitters requiring these devices to be verified at each proving would require unnecessary and costly worked to be performed by operator. High volume leases, those above 50,000 barrels per month, could result in multiple calibrations per month. Suggest changing the requirement to "Temperature, pressure, and density transmitters must be verified quarterly."

**3174.11(j)**

Sections (iii & iv) should state "temperature and pressure should be recorded from the transmitters when required to be verified during the proving."

**3174.12**

The accumulators used in the determination of average pressure, average temperature, and average density must be reset to zero whenever a new measurement ticket is opened. We are

unsure as to how many of the pressure and temperature averagers used in the industry are resettable. This may require equipment to be replaced.

### **3174.13**

BLM should work alongside the industry, API, GPA, AGA, to determine the validity of and establish standards for new measurement technology. Industry standards must be created to ensure the accuracy and use of new measurement technology. BLM should have an established process to adopt new or revised industry standards.

### **3174.14**

This section requires the operator to confirm “slop oil” in not recoverable, cannot be treated and sold, and provide documentation to this effect.

1. No process is defined for the operator to follow.
2. This could impact water disposal when bottoms are pulled from tank
3. Language is very open ended.

### **3174.15**

This section grants the BLM the right to “impose” immediate assessments for certain listed violations, with each having a penalty of \$1,000. GPA objects to the provisions of 3174.15 based on the following:

1. Because the regulations do not specify whether or not immediate assessments are appealable, must be paid immediate, etc., the use of immediate assessments could be construed to bypass the Constitutional provisions for due process.
2. The rules by which the BLM will assess violations do not appear to be transparent. The proposed rule states that the BLM will develop an internal handbook and that the handbook will be in place by the effective date of the final rule.
3. The immediate assessment may give the BLM “two bites at the apple,” as there is no provision that BLM may not issue both immediate assessments and later violations based on the aforementioned handbook of violations.
4. The violations listed are redundant and excessively punitive. The immediate assessments are:
  1. Missing or nonfunctioning FMP LACT...:
  2. Failure to notify the AO within 24 hours of a LACT system malfunction...:
  3. Mission or nonfunctioning FMP CMS...:
  4. Failure to notify the AO within 7 days of any changes to any CMS internal...:
  5. Failure to meet the proving frequency requirement for an FMP...:
  6. Failure to obtain a written variance approval...:

- (1) and (2) are redundant and potentially conflicting. If the AO goes to a FMP LACT and finds a flow computer that failed 1 hour previously, an immediate assessment will be generated based on (a). However (b) gives the entity 24 hours to notify the AO. However, if the AO goes to a FMP LACT and finds the flow computer failed 48 hours previously and the operator had failed to notify the AO, then two immediate assessments would be generated.

- (2) and (3) suffer from the same issues and (a) and (b).
- (5) does not allow for the operator and the AO to review the actual data and events. For example, there might not have been flow. Or, where contract proving companies are used, the contract prover company might not have been able to arrive at the FMP. The definition of the violation should give the AO latitude in imposing the immediate assessment.
- (2) and (4) require notice to the AO within 24 hours of the malfunction. First, the operator might not know of the malfunction for many days after the actual failure. Second, there is no indication of how the information is to be reported – phone, fax, e-mail, web-based, ... In addition, the operator might have to return to the office to submit the notification. This might take a number of days.

#### GPA Recommendations:

1. BLM should drop this provision and rely solely on the violation handbook.
2. BLM should develop the handbook through the comment process used for promulgation of regulations.
3. Once developed, the BLM should post the handbook on the website.
4. BLM should extend the notification for a LACT failure from 24 hours to 7 days, and BLM should make the reporting available via electronic means.

#### **Conclusion**

GPA appreciates the opportunity to submit these comments on the proposed rule. We look forward to working with the BLM as the process moves forward. Please contact me at (202)279-1664 or [mhite@gpaglobal.org](mailto:mhite@gpaglobal.org) if GPA can be of assistance.

Sincerely,

Matthew Hite  
Vice President of Government Affairs  
Gas Processors Association