

LUCAS LUCERO:OK, hello, and welcome to the BLM's public outreach meeting for the proposed revisions to the oil and gas regulations. I'm Lucas Lucero, senior policy analyst with the BLM's headquarters. And I'm stationed in Phoenix, Arizona. I'm serving as our moderator. And on behalf of the BLM, I want to thank you for joining us. I'd like to start by having our presenters introduce themselves, starting with Beth, please.

- Hello, everyone, and welcome. I'm Beth Poindexter. I'm an engineer on the production measurement team located in Santa Fe, and I'd like to introduce other team members-- Chris DeVault.

- Hi, I'm Chris DeVault. I'm on the PMT. I'm the senior oil and gas compliance specialist, and I'm located in Billings, Montana.

- Thanks, Chris. Next is Stormy Phillips.

- Hello, I'm Stormy Phillips. I'm an engineer with the production measurement team, and I am stationed in Tulsa, Oklahoma.

- Thanks, Stormy. Next, we have Amanda Eagle.

- Hello, I'm Amanda Eagle. I'm an engineer on the production measurement team, and I'm currently stationed in Anchorage, Alaska.

- And last we have Casey Hodges.

- I'm Casey Hodges, an engineer on the production measurement team stationed out of Granby, Colorado.

- Thanks, everyone.

- All right, thank you. Next, I'd like to introduce Mr. Nick Douglas, who is the assistant director for Energy, Minerals, and Realty Management, who will provide some opening remarks.

- Thank you, Lucas, and good afternoon or good morning, everybody. And on behalf of the BLM, I welcome all of you to this webinar to discuss to at least hear from my specialists relative to oil and gas site security measurements and regulations. And

before I even make any comments, I would like to extend a very great welcome and thank you to our specialists who have introduced themselves because without them, we wouldn't have this opportunity to sit around and talk about the revisions at all because these are the people that made it happen.

So among those, Beth Poindexter, who is our petroleum engineer just introduced herself. And Chris, of course, you heard from him. And Storm Phillips, Amanda Eagle, Casey, and to all these guys and Lucas, we say thank you to you for actually making this occasion happen.

So for us at BLM, one of the major issues that we wanted to address through this regulation was executive order that the president issued, and that executive order was 13783, followed by the secretarial order 3347 that actually asked for us to look at ways to reduce burden on the operating industry. And a basic reason for doing that or simplifying things to make it easier for them to operate is to actually so that they can create jobs, and get people employed, and improve our economy as well at the same time.

And so BLM is actually the agency that implements those policies through the actions of the men and women, some of whom I have introduced to you. So they are here today to share with you and talk with you and answer any questions you may have relative to the changes. And then, we'll look forward to hearing from you right after you hear from them and address your concerns.

And so with that, I'm going to say, once again, thank you to all of them. And this is the team that helps the BLM and the Department of the Interior implement the executive order and the secretarial order that actually makes it possible or directs that we as an agency actually create some economic certainty. Because part of these changes that is being made is to create some certainty for the industry. When your regulation is stable enough and your fiscal regime is stable enough, it's easy for industries to go out and make investments and then employ people. Then the economy continues to grow.

So I thank the men and women that pulled this off. And I also thank those of you that joined. It's a great occasion. So I'm just going to say thanks again and welcome. And I'm going to turn it over to the team so that they can tell you all about these

changes, all the changes that we're talking about. And then, they can address your questions. So with that, Lucas, as I said, thanks to everyone of you. And thanks for the 144 people that have joined us. And I'll get it back to you, Lucas.

- OK, thank you Nick. We appreciate that very much. Nick, if you can please turn your audio and video off.

- Yes, sir, if I can get to it.

- All right can we go to the next slide, please? OK, we'll start with our disclaimer. This presentation is not an official statement of policy of the BLM. This summary presentation was prepared for informational purposes only and does not in any way limit or modify the regulations described herein. Interested parties should not rely solely on the contents of this presentation, and you should take care to review the full official text of the regulations at 43 CFR subparts 3170, 3173, 3174, and 3175. Next slide.

OK, some general information. We ask that our participants please be respectful. Any inappropriate questions or comments will not be tolerated. We're here to address as many clarifying questions as possible. You may ask questions verbally or using the Q&A function. Keep in mind, we will address all the questions at the end.

If you want to ask a verbal question, you'll need to click on the More button at the bottom of your screen, and then click on the Raise Hand button. And you'll need to keep your hand raised until we call on you. Or if you want to write in your question, you can simply click on the Q&A button and write in your question.

Attendee video is going to be turned off throughout the meeting. We'll turn the audio on when we call on individuals who raised their hands to ask a question. Keep in mind, any remarks or questions from the audience regarding the presentation do not constitute as comments for the purposes of the proposed rule, and you can submit comments by mail, personal delivery, or online. Next slide, please.

So the timeline for the proposed rule-- the proposed rule was published on September 10 in the *Federal Register*. That kicked off a 60-day public comment period, which closes on November 9. The BLM also issued a media release on September 10 as well. We are going to make transcripts of the public meetings

available. Those will be posted at BLM's web page at blm.gov and the web page for production management team.

A little regarding the regulatory history-- our guidance was formally captured in Onshore Orders 3, 4, and 5, which were effective starting in 1989, 43 CFR 3170, 3173, 3174 35. The final rules were published in November of 2016 and became effective in January of 2017.

In 2018, stakeholders as well as BLM personnel did identify some challenges with implementation of some of those provisions, and then BLM began drafting some proposed changes. Next slide.

Regarding who may comment-- anyone may comment, individuals, businesses, organizations. The comment period will close on November 9. And to submit comments, you can send those by mail, personal delivery, or online. Comments should be as specific as possible and reference a specific section or paragraph of the proposed rule.

Comments-- please confine comments to issues pertinent to the proposed rule. And please also explain the reason for in your recommended changes and include supporting documentation. Also, keep in mind that strong comments are supported with data, so we encourage you to include data with your comments. And lastly, BLM is not obligated to consider or include in the administrative record any comments received after the close of the comment period or comments that are delivered to an address other than those that were listed in the proposed rule. Next slide.

And regarding where to send comments, identified here is where you can submit comments either through mail, personal delivery, or electronically. These were all listed in the proposed rule that was published in the *Federal Register*. And if you plan to submit comments electronically at www.regulations.gov, please remember to enter the correct regulatory identification number, 1004-AE59.

And lastly, a caveat-- before including your address, telephone number, or other personal identifying information in your comment, be advised that your entire comment, including your personal identifying information, may be made publicly available at any time. You can ask BLM in your comments to withhold from public review your public information, but we cannot guarantee that we'll be able to do so.

Next slide. And now, I'll pass it off to Beth who will cover the proposed changes to 3170.

- Thanks, Lucas. Just a reminder-- on the last slide, regulations.gov seems to be beta testing some new software for those of you who have gone there recently. My recommendation to you based on my experience is to be a little patient with that beta testing. And oftentimes, you can't get to the original site, even though there's a link to regulations.gov. Again, be patient with it and revisit it in half an hour, and my guess is you'll be able to submit your comment.

So starting with 3170, subpart 3170, which includes definitions and some general information, we start off with the specific requests for comment. And I think you'll notice in this rule, there's a lot more specific requests for comment throughout the preamble than there were in the 2016 rule, in the proposed version. So we start off here with a request for comment.

Should the BLM establish a federal interest threshold for applying its site security and oil or gas measurement regulations? What are the costs and benefits of setting a federal interest threshold, and what would be an appropriate threshold? Would such a threshold jeopardize the federal royalty interest and failed to satisfy the BLM's obligation under Federal Oil and Gas Royalty Management Act, FOGPMA, and to what extent? Could a similar threshold be adopted for applying the regulations to units and Communitization Agreements, CAs, producing trust minerals?

BLM specifically requests comment from state governments with federal and trust mineral oil and gas production that may be impacted by BLM regulation of mixed ownership units and CAs. So this basically is addressing the issue of mixed mineral interest in a spacing unit. Next slide, please.

3170.30 is a new section, and it addresses alternative measurement equipment and procedures, discusses the process that operators or manufacturers may follow to get BLM approval for using alternative oil or gas measurement equipment or methods. And as with a variance, any new or alternative measurement equipment or procedure must meet or exceed measurement performance requirements and include the ability to have an audit trail and a verification method and the site security requirements. And again, a note that an alternative measurement

equipment or procedure is not the same as granting a variance under 3170.40, and those are separate issues. Please keep that in mind. Next slide.

3170.40 is variances. We have a specific request for comment again. Should the BLM include a state or tribal variance provision that would allow states and tribes to request that BLM apply analogous state or tribal rules or regulations in place of BLM requirements? This is similar to what the BLM did in a 2018 3179 venting and flaring rule or methane waste prevention rule.

What would be the appropriate standards for granting a state or tribal variance? What would be the scope of a state or tribal variance? And what would be the appropriate process for obtaining a state or tribal variance? How would the BLM address changes to state or tribal rules or regulations on which a variance is based? Next slide.

Now we moved to 3173, which is site security and production handling. Next slide. 3173.20 and 21 are regarding seals. 3173.20(c)(2) clarifies seals are not required on valves on water tanks unless the valve could provide access to sales or storage tanks with common piping between the water tank and oil tank. In other words, if the valve can get access to oil production, then it has to be sealed.

This rule proposes to eliminate the following seal requirements on LACTs and CMS. That would include sample probes, LACT meters or CMS, manual sampling valves if so equipped, valves on divert lines less than 1 inch in nominal diameter, and prover connections. You'll notice that prover connections have come and gone, and now they're gone again.

Proposes to modify the following seal requirements-- meter assembly. This applies to mechanical meters only, as does the totalizer. the. Temperature average, it only applies when it's a standalone temperature averager. And back pressure valves require seals when they're fixed, but fixed meaning non-automatic adjusting back pressure valves that are downstream of the meter. If it's an adjusting back pressure valve, it will not require a seal. Next slide.

3173.21-- again, we've got a specific request for comment. Are the assumptions presented for the rationale underlying the proposed removal of six seal requirements on LACTs and CMSs appropriate and accurate? And we suggest you

take a look at 3173.21(a). And in addition to that, the rationale is located in the preamble under this section.

3173.31-- water draining operations. We eliminate the record requirements a through h, and we defer to seal record requirements. That's because we feel the seal record requirements fulfill the obligation of those record requirements in the current rule, and they were duplicative in nature. So we've eliminated those.

Again, please note that this does not negate an operator's obligation to report produced water on the OGOR-A. Operators are still obligated to do that. Next slide.

3173.50 deals with the site facility diagram, and we're replacing the API number with the US well number. And in this case, the number is exactly the same. However, the label has changed. So instead of saying API, we're going to be saying US Well. But the number is exactly the same, and it is assigned in the same way it historically has been.

So also, we've made a change in identifying the co-located facility with the box. And we've removed the requirement for a skeletal diagram of the other operator's co-located facility. We maintain requirement for one diagram in the case of storage facilities common to co-located facilities and operated by one operator. And we've eliminated the requirement to wait to receive an FMP number prior to submitting new or amended diagrams.

And we revised the timeframe to submit new permanent diagrams from 30 to 60 days after the facility is operational or the facility is modified. And that would be a modification other than the change from an API number to a US Well number. We eliminate the requirement to submit a modified facility diagram with a change of operator when the only change in the diagram is the operator's new name. If there's a change to the equipment at the facility, then a modified site facility diagram is still required. Next slide.

3173.60-- applying for facility measurement point number. We've changed this up a little bit, and the concept is that the operators will be applying for FMP numbers as opposed to FMPs, as it is in the current rule. FMPs exist whether or not BLM has assigned an FMP number.

And you might be asking, OK, what is the FMP? And that is the meter on which you report your volumes on the OGORs. Gas storage agreements would have FMP requirements when royalties are due. And we revised the FMP application deadline tiers created based on 2017 production data. In the current rule, we use 2010 production data.

The application deadline for the FMP numbers in the current rule is greater than 10,000 MCF a month, or greater than 100 barrels a month. For one year, we've increased that-- lowered it in the case of gas and increased it in the case of oil. The proposed rule, the deadline of one year will be greater than 4,500 MCF per month or greater than 500 barrels per month.

On the two-year FMP application deadline, the current rule has greater than 1,500 to less than 10,000 MCF per month or greater than 10 and less than 100 barrels per month. The proposed rule has greater than 1,000 MCF per month and less than 4,500 MCF per month, or greater than 50 and less than 500 barrels per month. And this is per agreement.

And then moving to the three-year application deadline in the current rule is less than 1,500 MCF per month or less than 10 barrels per month. In the proposed rule, we have the three-year application deadline as less than 1,000 MCF per month or less than 50 barrels per month.

And again, this is based on 2017 production data for this rule and these tiers, which were evenly divided in the production into thirds. And we used the same methodology that we did in the 2016 rule, but we were using 2010 production data. Next slide.

3173.70-- conditions for commingling and allocation approval, surface and downhole. The BLM objective here is to expand the ability to approve commingling of production while preserving measurement performance. We removed the requirement for the same revenue distribution on commingled agreements. And honestly, this was very difficult for BLM to comply with, and I'm guessing impossible for operators to comply with.

We removed the requirement for allocation method for produced water in the application. Operators of an approved CAA are still responsible for oil production

after upset conditions. And we allow for proposed CAA to include a lease by unit PA, Participating Area, or CA, Communitization Area, to be included as long as there is an approved APD at the time of the application. This provision allows operators to apply for commingling prior to drilling wells. Next slide, please.

We have a new condition for receiving a CAA. The operator would have to provide an overall allocation uncertainty analysis calculated using the propagation of uncertainty method. And we have four criteria in which this would occur. The overall allocation uncertainty analysis must meet the performance goals stated in 3174 and/or 3175. The analysis must show no allocation bias as a result of commingling allocation. The analysis must state the assumed underlying distribution of the volumes generated in the analysis and support the use of the distribution assumption.

Analysis is limited to four agreements for commingling approval. This is the only condition in applying for a commingling approval in which the operator is limited to four agreements. Next slide, please.

We have a specific request for comment with regard to the new commingling approval condition. Would the operator be able to perform the required analysis? Would an applicant use this condition to apply for commingling and allocation approval? Is there a better condition or method for ensuring no risk to measurement of federal or Indian trust mineral interests and approving commingling and allocation? Next slide, please.

So when you apply for commingling and allocation approval, we removed the requirement for a surface use of plan of operations, as we have in the current rule. And we've replaced this with an applicant-certified statement if new surface disturbance is proposed that the applicant is compliant with all pursuant regulation. So a certified statement is a sworn statement that the [INAUDIBLE] is prepared pursuant to regulation.

The same thing applies for the requirement on the right-of-way grant. We have replaced the requirement to show the application for right-of-way with, again, an applicant-certified statement that the right-of-way has been approved with a certified statement.

We allow for agreements that are not yet producing to be included in a CAA application. In order to do that, the operator needs to show an approved APD, offset well decline curve data, offset well oil gravity and/or gas BTU to support the projected production estimates in the application. And there's no need to wait for paying well determination prior to applying for commingling approval. Next slide.

And 3173.72-- existing commingling and allocation approvals. We've increased the threshold for grandfathered surface commingling to less than 6,000 MCF per month per agreement or less than 1,000 barrels per month per agreement. And we clarify that grandfathering of an existing downhole commingling approval does not simultaneously grant new surface commingling approval. There seems to have been some confusion in the 2016 rule about that issue.

3173.190 are the immediate assessments for certain violations. And we've modified the language in that first violation to read as follows. An appropriate valve on an oil storage tank was not effectively sealed as required by 3173.20 in the proposed rule. It eliminates the immediate assessment for failure to seal an appropriate valve or component on an oil metering system as required in the current 3173.3, which includes LACT and CMS components requiring seals. And now, I'll hand it over-- next slide, please-- to Chris DeVault, who will discuss measurement of oil, 3174. Thank you.

- And before I get started, I'd just like to remind everybody, you can begin asking questions through the Q&A at any time. Then, they will be read and answered at the end. Also, questions that have been submitted during the registration will also be addressed at the end, and there is no need to resubmit any of those.

OK, get started on 3174.30, the incorporated by reference section. First of all, it updates and reaffirms 16 of the IBR API standards to reflect the most current versions. The new standard's incorporated. And I'll read the standard, but not the associated dates, as you can see them.

So the new IBR standards are API MPMS chapters 7.1, 7.2, 7.4, and chapter 12.1.1. The IBR standards that have been removed are API MPMS chapters 6 section 1, chapter 7, 7.3, 12 section 2 part 1, 13 section 1, and chapter 18 section 2. Next slide, please.

3174.31 will be the specific performance requirements. First of all, for all FMP categories, there is no bias allowed, and they must have the ability to be independently verified. For very high volume, it's equal to or greater than 15,000 barrels per month, with an uncertainty requirement of plus or minus 0.5%. High volume is greater than 1,500 barrels per month and less than 15,000 barrels per month, with the uncertainty requirement of plus or minus 1.5%. Low volume is equal to or less than 1,500 barrels per month, and there is no uncertainty requirement on the low.

The BLM approved the equipment deadline for very high volume is within one year of the effective date of the rule. And then, for both high volume and low volume, if it's in service prior to the effective date, it's exempt until the equipment is replaced or production increases. If it's put in service after the effective date, it must be in compliance within two years. Next slide, please.

3174.31-- the specific request for comment on these performance requirements. BLM is particularly interested in the views of states and other nonfederal leaseholders with significant oil and gas production and who may have experience in implementing different thresholds based on their own assessment of risk tolerance and compliance costs.

Then, the requests are the proposed uncertainty levels in FMP category combinations in reasonable or reasonable and why. Then, suggestions on better uncertainty level and FMP categories that would also minimize risk to measurement and compliance costs, and please explain why. Next slide, please.

3174.41 is the approval of measurement equipment. The measurement equipment requiring BLM approval, the list is-- and please note the red font is the equipment that is new in this proposed rule. The black are the ones that existed from the 2016 version. And I'll just quickly read through these. Automatic tank gauge, LACT sampling systems, positive displacement meters, Coriolis meters, Coriolis transmitters, standalone temperature averaging devices, temperature transducers, pressure transducers, flow computer software versions, portable electronic thermometers, measurement data systems, and temporary measurement-- next slide, please.

3174.50 is the grandfathering, and it's this new section. It allows for the exemption of the approved equipment requirement a 3174.41 for low and high volume FMPs in service before the effective date of the rule. Please note, this is based on the PMT experience with field collected data and the limitations of testing not conducted in a controlled testing environment.

The next one is provides an exemption to the approved equipment requirement and will still require that the equipment meets the performance requirements of 3174.31. If the location is modified after the effective date or the FMP moves into the very high volume category, the grandfathering will be rescinded.

And regardless of the flow categories, devices not covered by this subsection are the portable electronic thermometers, measurement data systems, temporary measurement. Devices unable to meet the requirements of the rule are, for example, automatic temperature and gravity compensaters, and will not be grandfathered because they do not conform to the proposed rule. Next slide, please.

And the grandfathering section, the specific requests for comment are what would be the overall impact for not allowing or allowing this grandfathering option? Are the thresholds for the proposed grandfathering set at appropriate levels? Is there a better option or method for ensuring no risk to measurement federal or Indian trust interests while allowing for the continued use of equipment currently in service? And lastly is, the BLM seeks comment on its assumption that not grandfathering automatic temperature compensaters and gravity compensaters will not result in significant cost to industry. Next slide, please.

3174.60-- time frames for compliance. As in 3175, the timeline for compliance for oil locations will be independent of the FMP application date. A major issue with the current rule what is the connection to the compliance timeline of oil locations in service before January 17 of 2017 to the FMP application date. The allowance under grandfathering should make it easier for the operator to comply with these timeframes.

Since the equipment out in service after January 17, 2017 should already be in compliance with the current rule, there will be no phase-in period. Equipment in

service before January 17, 2017 will have the following phase-in periods. Very high volume will be one year after the effective date. High volume and low volume must comply within two years of the effective date.

The operator can voluntarily submit a sundry notice for early adoption of the rule. And then, the equipment approvals will be required two years after the effective date. Next slide, please.

3174.80 through 88-- The tank gauging was divided into these various parts to make the requirements easier to follow. First [INAUDIBLE] then, 3174.86(a) clarifies that tanks under 5,000 barrel capacity only require a single midpoint temperature measurement. And this applies to both the open and closing gauges in temperatures. Removes the reference to API and PMS 18.2 and replaces it with specific language on the use of ATG.

3174.88(a)(2) removes the specific requirement that the same tape and plumb bob be used for opening and closing gauges. 3174.88(b) provides specific allowance for automatic tank gauging. And then, 88(b)(4) adds specific language for on-site requirements, such ATG verification log. Next slide, please.

3174.100 through 108 is oil sales by lot. .102 clarifies their requirements for sample system approvals. .104 explains the requirements for the non-resettable totalizer. .105 states the temperature averaging device can be part of the Electronic Liquid Measurement or ELM.

106 explains the transducer requirements. .108 allows for dynamic or automatic adjusting back pressure valves for changing flow conditions. Finally, it provides for other meters and devices to be approved by the BLM through the PMT.

Then, on to 3174.110, Coriolis meter operating requirements-- specifies that non-resettable totalizer can be displayed on the ELM and that the meter must generate an output. And it lists the on-site and display requirements for Coriolis meters, whether they're used in LACTs or CMS. Next slide, please.

And the specific request for comment for this Coriolis meter section-- how would a Coriolis meter be tested without a transmitter? Does the performance of a Coriolis meter change based on the type of transmitter installed? How would the BLM

prevent the transmitter performance contributing to the meter uncertainty twice, first if the transmitter is required to test the Coriolis meter, and second, if a transmitter is tested separately? Lastly, is there data to support the position that a transmitter's contribution to meter uncertainty is insignificant and therefore will not change the Coriolis meter's uncertainty? Next slide, please.

3174.120, Electronic Liquids Measurement or ELM is a new section. BLM must approve the software associated with the calculation of volume. The proposed rule adds a new section modeled off the gas subsection and will include these requirements specific on the use of ELM-- display requirements, alarm logs, event logs, configuration logs, Quality Transaction Records or QTR, and backup requirements.

And 3174.121, the Measurement Data System or MDS-- another new section, and it basically adopts the industry terminology of a Measurement Data System or MDS. For both 3174 and 3175, the current term accounting system is changed to MDS. Next slide, please.

3174.130(h)-- Truck-Mounted Coriolis or TMC. It adds specific language to address truck-mounted Coriolis as a CMS or Coriolis Measurement System. And additional TMC requirements include must meet all the requirements of a very high volume FMP.

The meter factor used during the transfer must match the operating conditions of the fluid being transferred. The display requirements apply only during the transfer. Proving frequency is derived from the total volume of oil flowing through the meter. BLM inspectors must have the ability to witness the proving. All data must be accessible to the authorized officer upon request.

All lines must be connected before the seal on sales valve is removed. The TMC must comply with audit requirements of 3173. And finally, any deviation for the CMS requirements on a TMC must be treated as an alternative method and be approved by the BLM through the PMT. Next slide, please.

3174.150 through 158-- the meter proving requirements. Without a clear and unified industry practice for the determination of normal operating conditions, the BLM has proposed a prove forward method. Creates a path for the acceptance of

the linear meter factor if proper data is submitted to the BLM for PMT review. The requirement to prove a LACT at start up has been changed to allow for line fill.

The prove must now be conducted in the first 15 days of flow and then the meter factor be retroactively applied to that previous flow. It allows for the use of all proving runs from API and PMS 4.8 table A1, rather than only allowing the five consecutive rounds within a tolerance of 0.0005. It allows for other proving methods to be submitted to the BLM for PMT review. Next slide, please.

Continuation on the meter proving requirements in 3174.152-- the proving would determine the normal operating range for the LACT or CMS for that next period. The limits around the flow rate, temperature, pressure, and API gravity would define the range around which another meter factor or prove would be required.

The language is modified in the minimum proving frequency requirements to clarify the intent in 3174.153. It will allow for justification to be submitted for excessive meter fact and deviation under 3174.154. Allows for future methods of proving that are not dependent on pulse counts to be submitted to the BLM for PMT review.

3174.158 includes specific language concerning the raw data that must be preserved on proving reports relating to the calculation of the meter factor. And then, it removes the requirement that proving reports be submitted within 14 days and replaced with a requirement under 3174.158(c) that day be available to the authorized officer upon request. Next slide, please.

3174.151, meter prover-- another specific request for comment. The BLM seeks comments on whether other proving technologies or procedures that are not presented in this proposed rule but that meets its requirement. And please submit sufficient data to support your comments.

3174.152, meter proving runs-- the normal point defined by conditions of time of proving. Unit would have to maintain operation within 10% of that defined value for flow rate and pressure, 10 degrees Fahrenheit for the temperature, and 5 degrees on the API gravity. And BLM seeks comments on these ranges and any supporting data that may show that the range should, without affecting meter factor, be either wider or narrower. Next slide, please.

And now we're at 3174.160 through 162, the measurement tickets. These sections outline all the required information on a uniquely numbered measurement ticket or volume statement and may be in paper, electronic format, and again, must be available to authorized officer upon request.

3174.161 clarifies the information required on the tank gauging measurement ticket at the time of transfer before the truck leaves location and those that can be completed at the office. Basically, all the information necessary to correctly net the run ticket must be on the ticket in the field, but then it can be netted out again if the office. The specific reference to 3170.50(g), requirements for location information, are also now required on that ticket.

The requirement for a LACT or CMS run ticket to include net standard volume has been added in 3174.162(a)(11). It now allows for a volume statement generated by any ELM or QTR to be submitted in lieu of a measurement ticket. The requirement for this option are added in 3174.162(b) and must be raw, unedited data.

One item that's not on the slide that I'll just quickly cover is 3174.190, immediate assessments. The immediate assessments associated with the requirement to notify the authorized officer within 72 hours of a LACT failure has now been removed. And the other one is clarifies the language associated with alternative method of measurement in this section. Next slide, please. Now we'll move on to Stormy Phillips for gas. Thank you.

- All right, guys, we're just flying through here. I appreciate that people have started sending in those questions. Gets them a little time to get them sorted out and ready to go, so I encourage people to keep doing that. I'll remind you, just at the bottom of your screen there, there's a little box that says Q&A, and you can click on that and type in a question at any time.

I'm going to talk about the changes to 3175. As you guys will have noticed from reviewing the document, you're not going to see quite as many changes here, but we do have some key changes. Starting today, we'll talk about the specific performance requirements.

In here, you can see a pretty significant increase in the allowable uncertainty relating to the heating value. Heating value and flow rate have an equal impact on

royalties, that we felt after review that it made sense to have those thresholds be at the same level. So we're proposing to change the very high volume threshold to plus or minus 2% and the high volume to 3%. But we are seeking specific comments to that. Does this change make sense, or should we consider something else? Next slide, please.

For the equipment that's requiring a BLM approval, there's not a lot of changes here, but there's a couple of key changes that I'm going to explain what those are. Same thing that you saw in the 3174. The items in black were in the 2016 rule the same way, and the items in red are new.

The first two items there you'll see are Coriolis meters and ultrasonic meters for gas. In the 2016 rule, there was a general requirement for linear meters to be included. Now, before the BLM or the PMT got involved in working on these regulatory rewrites, we were working on testing protocols for these different pieces of equipment. Writing a specific testing protocol to apply to all linear meters proved to basically be too complicated and too nebulous.

So rather, we've taken the two linear meters that have been most requested from the BLM, that being gas Coriolis meters and gas ultrasonic meters, and we're specifically pointing those out so that we'll have testing protocols for gas ultrasonic meters and gas Coriolis meters, and you can apply for those. Other linear meters would now be included in that alternative measurement category that Beth talked about earlier.

Next has to do with the software used in gas chromatographs. Now, just like we stated before on the performance requirements, BTU value and volume have the same impact on royalty, so we felt it was necessary to review some of the GC software. What we have found as we've worked on this, as you guys have seen from the 2016 rule, a pretty significant increase in our looking into of gas sampling is that a lot of this software is very homegrown, a lot of times, just Excel sheets and things like that.

So just like we see in the gas flow computer software, this is going to be a review of that calculation method, basically reviewing that the way that software calculates versus a reference, so same thing that we see in the gas flow computer. So this isn't

a review of GCs, or how they're built, or how they're operated, or anything like that. It has to do with the review of the calculation methodology.

For water vapor measurement equipment-- we'll talk about this again here in a little bit when we talk about water vapor measurement-- we at included the use of things like laser detection devices to measure water vapor in gas. We didn't expect what we found later on, which is that some operators are accidentally using devices that are not intended for use in natural gas, and it's giving erroneous readings to the level of water vapor content. So we felt the easiest way to handle that since there is not a lot of manufacturers of these devices is we're going to review those devices to make sure they're actually designed for use in gas for the detection of water vapor.

And then, there's a change here, again, changing from accounting systems and measurement data systems just because that helped alleviate some of that confusion. And again, this is a review of calculation and preservation of the raw data, not a review of you know someone's entire accounting system, which is one of the reasons why we changed that language. Next slide, please.

For the grandfathering, a lot of the 3175 grandfathering sections stayed the same. So all those previous grandfathering allowances for meters installed before January 17 of 2017 that were built to different standards, that all has stayed the same. Now, there has been a change. That's the same that we saw in the 3174 section. And that is stating that devices that are in place before the effective date of this rule, we are proposing, would be exempt from the equipment approval requirement.

Now, I want to be very clear because this has confused a lot of people, and we've gotten a lot of questions about this. This exemption is from the requirement to use approved equipment on a location. It is not an exemption for many other parts of the rule. So in this case, if we look at the performance standards, you still have to meet those performance standards. But instead of that performance level being the performance level given on the BLM-approved equipment list, we're just going to refer back to the manufacturer's advertised or published performance data.

So as long as that equipment still meets the performance requirements, it'll be allowed for use. But it doesn't just grandfather everything, regardless of how it works. It's just it won't be required to be on that approved equipped list, and we did

that because we understand there's a lot of obsolete equipment out there that manufacturers are never going to test. And so it makes sense that since we can't really use field data or anything like that for these approval processes to just grandfather that in and continue to work off that old data. Next slide, please.

Timeframes for compliance-- now, the 3175 rule did not have the problem that the 3174 rule had with the timeframes being connected to the FMP number application. So all the timeframes for compliance for the 2016 rule have already passed. And since there hasn't been any significant changes, we're not proposing to include any implementation timelines for this proposed update. So basically, the effective date of the rule would still apply to equipment that's on location because equipment that's with in compliance with the 2016 rule should already be in compliance with this rule.

Now, there are three exceptions, the first one being GARVS. Now, you guys have seen the IM that's come out a while back talking about that we're still working on the development of GARVS. Now that we're even promoting or proposing changes that might affect GARVS, we have changed. Now, GARVS will go into effect 60 days after the BLM releases that software. So once the BLM finishes all their vetting process and we've decided on a software and we put that out, you have 60 days to start reporting through that system.

The next is approved equipment list and approved software list. And those would go into effect two years after the date of the rule. And that's two years after the date of the rule for those locations and equipment at a very high volume or installed after the effective date of the rule. Those things that fall in that grandfathered category would remain grandfathered unless they were replaced or changed into a very high volume category. Next slide, please.

For orifice meter tubes, one of the big changes that you'll see here has to do with a lot of things that we learned relating to basic meter tube inspections. This was a new concept, and we didn't 100% anticipate everything that would come out of it, so you're going to see some significant changes here. The first thing you're going to see is a very big increase in the time between basic meter tube inspections.

What we have discovered after witnessing a lot of these inspections is that those

meters with the highest flow rate tend to have less buildup, just because of the velocity of the gas. So we have extended those frames to be reflective of that. Now, there is a new category of initial basic meter tube inspection. And this is related to the fact that we have found that a lot of garbage and things like that in the lines tends to affect the meter fairly shortly after startup.

So you'll see on a very high volume meter that within the first year, you're going to have to do a basic meter tube inspection so that we make sure there's nothing that's been caught in the tube from that start up. And then the next inspection after that would be five years. So you'll see that there's now these two categories, this initial and then this routine, and we've tried to reflect that.

Next, we've talked about that there's a few items that got implemented a way that wasn't intended in the 2016 rule, the first of those being, let's say you're doing a basic meter tube inspection, and you look down in there. And man, there's some filter paper caught in the flow conditioner. Well, that filter paper, you could go in there, you could remove it. It hasn't damaged the meter tube at all. But according to the actual wording the 2016 rule, it would then require a detailed meter tube inspection. That wasn't really our intent.

So in this rule, we make it clear. If there's an obstruction that can be easily removed and it has not damaged the tube in any way, then you're not required to do a basic or a detailed meter tube inspection. You can just return it to service, and it's fine.

Same thing with those low volume meters. The 2016 rule says if you see pitting, then you need to clean the meter. Well, cleaning isn't going to clear up that pitting, so there's really no value to that. So we've removed that language just to make it clear that that's not going to trigger these other events.

The next thing you're going to see talks about the orifice plate. So when a well is brought online or refractured, the rule requires a biweekly plate inspection. Now, there was some confusion with operators and with inspectors that the BLM would need to witness a good plate before you can move to your routine schedule. So we clarified in this rule that that is not the case. Once you pull out the plate, it passes inspection, you can move to the routine, and there does not need to be a BLM witness to make that happen.

The last thing is we've got a lot of comments relating to that we had these very specific table in the 2016 rule sampling section that gave the two-day maximum time between events. But then, you have all these other parts of the rule-- meter verifications orifice plate inspections, and those things-- that doesn't have such a table. And we agreed. That makes good sense.

So we've taken that table. We've moved it to the appendix, and then we've applied it to things like this orifice plate inspection, giving the maximum time in days between events. Next slide, please.

For mechanical and electronic chart recorders, one of the biggest changes you're going to see here is that in a lot of our discussions with operators, with inspectors, looking throughout the industry, talking with the people who manufacturer these secondary devices, we've found that it seems to be the case that more interaction tends to induce more error than we would see naturally occur through drift of a device. So we are proposing that for electronic flow computers that low, high, and very high volume would all have verifications required every six months.

Now, we know a lot of operators go out there. And every time they do a sampling or plate change, they just go ahead do a verification. That's fine. But we're saying for a maximum time frame between events that we would go for six months across the board. If we to the next slide, we're actually asking for specific comments of that. Does this justification, this logic that the BLM has proposed makes sense, or is there another way to do this? Next slide, please.

For logs and records, there was a lot of confusion or a lot of discussion about the change that was made in the 2016 rule. In the proposed 2016 rule, we stated there was a certain amount of significant digits that we needed to be able to do our independent verifications. Then we got a lot of comments about how it's very difficult to guarantee a certain number of significant digits because values change all the time, and flow computers can't in real time change that based on significant digits.

So the solution that was put into the final rule was that we would just require so many decimal places. That way, we would guarantee that there was always enough significant digits. Well, this created an unintended consequence, which was that it's

creating double precision math that's too complicated for some flow computers, even good flow computers that would otherwise easily meet the requirements of this rule.

We agree that wasn't the intent. The only thing that we need is the correct number of significant digits. So we have gone back to that significant digit language, but we are requesting comments on that. Does it make sense to go back? Is decimal places really the only way to do it? Or what are some comments or thoughts on that? Next slide, please.

For gas sampling analysis, one of the big things that we wanted to talk about had to do with the sample cylinder cleaning. So in the rule, it states that you need to use that GPA standard method for cleaning or an equivalent method. And we just want to make it clear in the new rule that those equivalent methods, just like any other equivalent method, would need to be reviewed by the BLM and approved. But once it is approved, is approved across the board, and anybody can use that.

Again, this is one of those things where it was written into the rule. But in practice, what we have seen is that people are using methods that are not in any way sufficient or compliant with what GPA recommends. And it's hard for inspectors to know that's happening correctly without any kind of review.

The next thing has to do with a lot of data that we received relating to the requirement to have the C9+ plus analysis, which was previously for samples that had a mole percent greater than 0.5. Now, through all of this, we agreed and we really appreciate all the data that we got on this. It told us exactly what we needed.

We noticed that in that data, there really wasn't a significant bias that presented itself till around 1 mole percent. So we're suggesting to change or we're proposing to change that to that requirement for the C9+ analysis to that 1 mole percent. And based on the data that we received and we reviewed, that is going to significantly, significantly, significantly reduce the number of required C9+ analysis.

Now, one thing that we'll talk about on the next slide too is that an operator can always exceed these requirements. So there was some confusion that if you were required to do a C6+ analysis that you couldn't do a C9+ analysis. But we want to make it clear that you can't do that.

Now, we also removed the requirement for reporting unnormalized mole percent by each component. You'll still report the total unnormalized mole percent. But the way the BLM uses that, we don't actually really need the component level breakdown of that unnormalized mole percent, and that seemed to cause a lot of issues, so we've just changed that up a little bit.

We also see some changes to the sampling frequency. The biggest change here is the fact that we're proposing that we would no longer have anything that would require an online gas chromatograph. So even if you had a highly variable, very high volume FMP that the BTU values were just all over the place, it would still never require sampling more than every other week. So there wouldn't be the possibility for there to be a requirement to install an online gas chromatograph. Next slide, please.

In relation to online gas chromatograph, we are seeking comments about any standards or practices that should be included in our discussion about online gas chromatographs if they are used. We, again, want to people to look at the very large section that we have in the preamble on 3175 relating to that component analysis for the C9+ and if that makes sense. And I'm sorry, that should have been 3175.119, not 199.

And then, you'll notice also that there's been a big part of the rule that's been removed, and that was the transducer testing protocol and the gas flow computer software testing protocol. Now, throughout 3174 and 3175 in the 2016 rule, there were a lot of items that needed BLM approval. But only these two had very specific testing protocols written into the regulation.

And that created a problem because what we saw is after the 2016 rule was published, API published a testing standard for temperature pressure and differential pressure measurement devices. And that testing standard would tell the BLM the information that we needed to know, which is that these devices meet our performance criteria. But it varies slightly from what was written directly into the 2016 rule. But because that was codified into the regulation, it would require a rule change such as this for that regulation to be modified.

So the stance the BLM would like to take now or we're proposing to take is that

we're going to use the requirements of the rule, the performance requirements, to establish what needs to be identified. But then the specific testing protocols would be available on the BLM website so that we can work with manufacturers who, in most cases, are going to be doing all this testing and organizations like API to figure out the best way to conduct testing that will show compliance with these performance requirements and allow the flexibility for that to be done without requiring a regulatory rewrite. Next slide, please.

Reporting of heating value-- again, one of the things has to do with that water vapor content. We allowed that if somebody didn't want to report a dry value, they wanted to report a wet value, you could do that if you measured the water vapor. But there was some confusion. So we if we wrote into the rule that if you are reporting a wet value, you do indeed need to report the water vapor content that you are deducting from that. So that needs to be part of that deal so that we can do that calculation.

Then, I already touched on this previously, but we are adding in a requirement for water vapor detection devices to be reviewed and on the approved equipment list, basically because of the issues that we've seen out in the field about some equipment not designed for that use being put out there. Next is that language I talked about previously that if an operator chose to do a C9+ analysis, they could do that. They're not required to do a C6+ just because that was written off the rule. You can exceed that minimum requirement.

Next, we had a lot of operators comment that, contractually, they don't use exactly a 60/30/10 split for the C6+ values. And that makes sense to us, and we understand that if those values vary slightly, it probably doesn't have a big impact. So we've replaced those values for C6+ and C9+ plus with a minimum BTU threshold. So we're seeking comments on that, but the concept there was to allow some flexibility in that reporting. Next slide, please.

I won't spend a lot of time on this because it doesn't affect very many meters at all. But for the very few federal gas storage agreements, there was a lot of questions about whether or not those meters would have to meet all the requirements of 3175. Would they be FMPs?

So we created a new section that basically addresses meters that do not report

royalty volumes but instead are just reporting injection and withdraw fees. So there's some slightly different requirements for there. Most of them have to do with the reduction in sampling requirements and things like that. And there's a big section of the preamble for that. So for the very few operators that this affects, we welcome comments related to that.

And lastly, we'll see that we've removed a few immediate assessments. Both those immediate assessments were tied to the use of mechanical chart recorders. Mechanical chart recorders are only allowed to be used in meters that fall into the low and very low volume category, and those meters don't actually have volumetric uncertainty requirements. So we felt that the immediate assessment associated with that was probably unwarranted. So you can still very much be inked for those violations, but they wouldn't incur that \$1,000 immediate assessment. And that'll be the end of my section, and I'll hand it back over to Lucas to set us up for the question and answer period.

MAN: Lucas, you're muted.

- Thank you. Sorry about that. Thank you to our presenters, and we're now moving into the Q&A portion of the meeting. Can we jump to the slide that talks about how to raise your hand? There we go. So we'll now focus on answering your questions.

And you can continue to enter your questions in the Q&A box, or you can use the Raise Hand feature if you want to speak. And then, please keep your hand raised until we call on you. We do have some attendees that have joined by phone. So for those of you on phone, if you want to ask a question, you'll need to dial *9 to raise your hand and then *6 to unmute yourself.

Our subject matter experts are going to provide verbal responses to all of the questions. And again, for those that are interested in submitting comments to the BLM, those would need to be submitted by mail, hand delivery, or online at www.regulations.gov.

So with that said, we did receive a number of questions that came in during the registration process, so we'll go ahead and start there. So Casey and Amanda can go ahead and start working through those.

- All right, we'll start going through these questions. As he said, first, we'll go through the ones that came in through the registration process. Once we get to the questions that have been submitted in this session, if you would like to expand on your question while we're answering or have another comment or something to make while we're answering, be sure to raise your hand, and we'll be on the lookout to try to address that while we're talking about the subject.

OK, so the first question is for you, Lucas, actually. Will the proceedings be recorded digitally for layered distribution for those who cannot attend?

- Yes a copy of the PowerPoint and the transcript of the meetings will be published on the BLM website in the same area where previous PMT presentations have been posted.

- Thank you. Next question is for Beth. The next several questions will be you, Beth. Will there be a time for ATI numbers to be used with or instead of the US Well numbers? Some companies will need to add the US Well number to the accounting processes and reports.

- No, we'll be starting to use US Well numbers when the rule becomes effective, which is 60 days after the final rule is published. And I just want to comment. We get a great number of questions and comments about this issue. And in the preamble, we basically have stated that API transfer the unique well identifier standard to the Professional Petroleum Data Management in 2010.

At that time, PPDM created the US Well number, and that's the new industry standard for identifying oil and gas wells. And as far as we can understand from PPDM, they assign those numbers exactly the same way that API numbers were assigned in the past by state regulatory authorities. So at the time an operator goes to apply for an APD with a state, they assign what used to be called the API well number. It is now the US Well number.

I hope that helps. We've got at least another two or three questions regarding that same topic.

- Yes, when we get to those questions, we'll go ahead and probably just refer back to that same answer. Next question, Beth, is will corrected site security diagrams need

to be submitted to address the API to US Well number change?

- No, the site facility diagram does not need to be updated to only change the label of API number to the label of US Well number.

- Excellent. Next question-- is there a proposed window of time for AFMSS 2 to be up and able to accept FMP number applications.

- The AFMSS 2 development team is working to be able to accept FMP number applications when the rule becomes effective. I believe they've already started working on it.

- The next question is clarify the MDS, Management Data System, is on-site and does not grant BLM access to any company accounting process.

- If the operator elects to use an MDS as part of the process for OGOR reporting, it must be approved by the BLM. The only requirement is that the use of an approved software. The definition of MDS is found in 3170.10, and it reads as follows, Measurement Data System, MDS, means a system that captures and stores source records from the flow computer at an FMP. The MDS is used by operators to validate, balance, and report volume and quality. An MDS does not include supervisory control and data acquisition SCADA systems.

- Next question is does BLM realize the PMT tiers for applying for FMP means nearly all filings will be in the first year greater than 150 MCF per day and 16 and 1/2 barrels of oil per day?

- The BLM used the 2017 production-based data based on federal or Indian agreements from OGOR reporting and divided the production evenly into thirds based on agreement. Based on this, one third of the FMPs will have an application deadline in one year, one third a deadline in two years, and one third a deadline in three years. The same method was used in the 2016 rule using 2010 production data from ONRR [INAUDIBLE].

- Next question-- does the BLM think it is fair to invalidate all existing off-lease measurement and commingling approval and use limited resources to review all such approvals in the local BLM offices?

- At the time of the FMP application, the BLM will review existing off-lease measurement and commingling approvals.
- If the BLM is to determine whether a facility is a gas storage agreement measurement point or facility measurement point based on native gas production, is it possible that the GSAMP can become an FMP, and then when storage gas exceeds the base gas, native gas, it will revert to a GSAMP.
- Yes, if royalties are due on native gas, the meter must meet the requirements of an FMP, and a GSAMP can become an FMP.
- If only certain wells within a storage area are on federal or Indian lands, would the GSAMP injection/withdrawal meters be considered GSAMP, and the specific wells would become FMP when withdrawing base gas, native gas?
- Gas storage agreements are established with contracts written by BLM state offices. There are currently 35 gas storage agreements regulated by the BLM, and this part of the rule only applies to these federal locations. At gas storage agreements, FMPs are only required when royalties are due on native gas.
- And one last registration question for you, Beth, what is the expected timeline for the PMT to start accepting equipment, hardware, and software for approval?
- BLM can accept applications for approval under the current regulations at this time. BLM will be able to accept applications for approval under the revised regulations once they become final. BLM plans to provide non-binding guidance, e.g., testing protocols, that will help to ensure that applications contain the information the PMT needs to process applications expeditiously.

We note that this guidance may be considered, quote, guidance documents subject to the requirements of Executive Order 13891, Promoting the Rule of Law Through Improved Agency Guidance Documents, published October 8, 2019. The Executive Order 3891, Review Process, may delay issuance of the guidance.

- OK, thank you, Beth. We're going to move on to some questions for Chris. Chris, what kind of delay can we expect before the PMT approved list is available?
- BLM anticipates the first approved equipment list will be available at the end of

the timeframe listed in 3174.60 and 3175.60.

- 3174.43(a)-- will a sundry need to be sent in for FMPs already complying with the order?

- We assume the question refers to 3174.43(a)(1), requiring a sundry notice for voluntary or early compliance with 3174. Oil FMPs installed after January 17, 2017 should already be in compliance, and no sundry notice will be required. For oil FMPs installed prior to January 17, 2017, a sundry notice will be required to early adopt.

AMANDA

Casey, you're muted.

EAGLE:

- Thank you, Amanda. 3174.60(b)(2) implies that these FMPs must meet the order in two years after the effective date, and per 3174.50, grandfathering the equipment will not need to be approved by the PMT. Which rule applies, grandfathering or on the list?

- 3174.50 has an exception from the requirement to use approved equipment listed in 3174.41(a) through (i) at high and low volume FMPs. This exemption terminates in the event the equipment is replaced or the FMP moves to a very high volume FMP. Portable electronic thermometers, measurement data systems, and temporary measurement are not exempt from the approved equipment requirement. 3174.60 timeframes for compliance always apply except in the case where there is 3174.50 exemption.

- In regards to handwritten tickets, when the data is entered into a measurement data system, is the manually entered data considered to be original flow data, or is the handwritten ticket considered to be the original data?

- The source document is the original document. If the source document is a handwritten ticket, the handwritten ticket is the original document.

- Will the PMT have an approved list of measurement equipment in the software, including all models, makes, and version posted on the date the rule is effective?

- No, the enforcement of the improved equipment list will go into effect two years after the effective date of the final rule.

- 3174.156, verification of the pressure transducer for liquid measurement, is relatively much less important than verification of the temperature transducer. Considering the low pressures most measurement systems operate under and the lower compressibility of liquids, BLM should consider adding an exemption to this rule for systems where the pressure is less than 100 PSIG.

- The BLM welcomes data to support this statement. Standing industry practices uses the pressure in the system to correct for flow volume. This has a direct impact on royalty due. In order to change the proposed rule, please submit data to support your position. If warranted, BLM will evaluate the royalty impact of such a change.

- Regarding 3174.152(a)(1) (4), 3174.152(h)(1) through (2), and 3174.153(f), is it intended that the full range of normal operating conditions that the meter must remain between proving cycles can be expanded by proving at different conditions and applying the methods described in 3174.152(h)(1) and/or (2) to define a wider range for normal operating conditions if needed and supported by the last proving results?

- Yes, that's the intent.

- I like the long questions with the short answers.

- Regarding 3174.152(c) is the intention of the reference to API MPMS chapter 4.8 table A-1 to allow the tolerances as stated in table A-1, which correspond to different numbers of runs, to be applied instead of 0.0005 when the number of runs is more or less than five, as described in the method shown in chapter 4.8 annex A?

- The BLM recognizes that the API 4.8 standard provides a table for various runs and repeatability that meet a 0.027% uncertainty. Therefore, the proposed rule would incorporate that table into the regulation to allow greater proving flexibility while keeping the same performance standard for the proving.

- Regarding 3174.60(e) and 3174.41, is it intended that there be an exception during the two-year period described in 3174.60(e) that would allow the equipment listed in 3174.41 to be used prior to BLM approval? The proposed 3174.41 mentions an exception related to grandfathering and 3174.50 but makes no mention of an exception for 3174.60(e).

- Items covered by 3174.50 are exempt from the requirements and 3174.60(e), timeframes for compliance.
- Regarding 3174.50(b), would equipment allowed under the grandfathering provisions that is only partially replaced, for example replacement of the internal mechanism of a PD meter, no longer be exempt from the approval requirement in 3174.41, or would the entire metering unit need to be replaced to lose the grandfathering exemption?
- Any in kind repair is not considered a replacement.
- Regarding 3174.162(a)(4), are the opening and closing totalizer readings of the indicated volume that must appear on the measurement ticket intended to represent the values from the non-resettable totalizer in the meter?
- Yes that's the intent.
- Regarding 3174(a) and 3174.110(b), if the meter is a PD meter or a Coriolis meter in a LACT system or a CMS, can a non-resettable totalizer value be generated by the flow computer using the pulses from the meter? In 3174.110(b), it states that, quote, a flow computer generated totalizer does not comply with the requirements of this subpart, end quote, and it is not clear why this restriction would be necessary for a CMS but not for a LACT. The concern is that in addition to receiving pulses, a flow computer and a CMS would also require digital communication to read the non-resettable inventory totalizer from a Coriolis multimeter in order to display this value and include it on the measurement ticket, but this restriction would apply only for CMS and not for LACT systems.
- The intent is that the requirement applies to both LACT and CMS. The preamble section for 3174.104 states the proposed rule would make it clear that the non-resettable totalizer display may reside in an electronic flow computer. The non-resettable totalizer could display through the flow computer, but the output must be from the meter. We can see the concern with the regulatory text, and we'll amend the discrepancy to reflect the intent.
- Regarding 3174.83(b), is the requirement to only follow the operation sequence in

API MPMS 18.1 for tank gauging intended to prohibit the use of Automatic Tank Gauging, ATG, which is described only in API MPMS chapter 18.2.

- Yeah, 3174.84 through 3174.88 gives provisions to allow for ATGs.

- Regarding 3174.105, can a Coriolis transmitter be approved to also function as an electronic temperature averaging device if it meets all requirements of 3174.105?

- Yes, this would require BLM equipment approval for this use.

- Regarding 3174.157, is it intended that the Density Meter Factor, DMF, should be determined and applied as described in API MPMS chapter 9.4, annex H, in cases where the verification of the density accuracy requires remediation?

- The BLM did not incorporate that standard by reference. Please submit comments if you feel this is a good approach and explain why.

- Regarding 3174.120, as long as it meets all the requirements stated for an ELM and 3174.120, does a Coriolis meter transmitter have to meet all other requirements in API MPMS chapter 21.2 to meet the requirement for an ELM for all CMS stated in 3174.120?

- Yes.

- Regarding 3174.30(b)(30), why is API MPMS chapter 14.3 on natural gas orifice metering referenced to in 3174.31(a), which appears to only be intended to address liquid volume measurement uncertainty?

- In this section, API chapter 14.3 is used to reference the root sum squared method only.

- Regarding 3174.31(a), is the methodology described in the newly published API Technical Report 2579, Liquid Hydrocarbon Uncertainty Calculations also acceptable for calculating overall uncertainty?

- The BLM has not reviewed the recently published API TR 2579 Liquid Hydrocarbon Uncertainty calculations.

- Regarding 3174.151(a), is the intended reference to API 4.5, subsection 6.5 meant

to be table 1 rather than table 2?

- Great catch. Yes, this is in there and should reference table 1. Thanks.

- Regarding 3174.156, what is the required accuracy for a pressure transducer?

- Individual components do not have an accuracy requirement. It's a measurement system performance requirement.

- OK, thank you, Chris. That finishes off your pre-submitted questions. We're going to move on to some for Stormy in 3175.

- Casey, can we go back real quick? We had on number 17, it got typed in there wrong, so we need to restate that. You want to restate that question, and I'll answer it?

- Yeah, I'll repeat the question, and you can-- this is regarding 3174.120, Stormy?

- Yes, that's correct.

- Regarding 3174.120, as long as it meets all the requirements stated for an ELM in 3174.120, does a Coriolis meter transmitter have to meet all other requirements in API MPMS chapter 21.2 to meet the requirement for an ELM for all CMS stated in 3174.120?

- Yeah, we said yes, but the answer is, yes, if the Coriolis transmitter can meet the requirements listed in that 120 section, then it can be approved for such use. The other parts of API 21.2 are not part of the requirement, only what's stated in that subsection.

- Thank you for the clarification there, Stormy. We're going to move on to some 3175 general questions. Equipment/software PMT approvals-- why require PMT approval if the equipment can meet or exceed the standards published in API, GPA, et cetera? As long as the equipment meets the BLM uncertainty 3174.31(a), the PMT approval should not be needed.

- The performance requirements are BLM requirements, not API or GPA requirements. And said the BLM equipment and software approval is a verification that the equipment meets those published specifications. .

- Is there a proposed window of time for GARVS to be up and running? And is there any discussion about a common reporting format?
- At this point, the BLM doesn't have any estimated date for GARVS.
- In regards to 3175.92, the two MCF per day and 2% requirement to trigger rereporting, does this mean the adjustment is averaged out to two MCF per day, even if the adjustment only touches one day in that month? And likewise, the 2%, is that talking about a 2% adjustment for the entire month?
- These requirements are based on your OGOR reporting, not the daily QTR values. So those are relation to the OGOR, not those QTRs.
- Pardon me. Is the tables time timeframe referring to sample dates or effective dates if the dates are different?
- Thank you for this question, and we look forward to a comment on this. We recognize that this point's a little bit confusing about whether or not the date of the sample or the date of the analysis. The intent was to be that the timeframe is between samples. But either way, the effective dates have no bearing on this. It's either the date of the sample or the date of the analysis.
- At times, we will have samples with analyses that are much different than historical. These samples will be rejected. If a sample is rejected, what will the meter still need-- or excuse me. If a sample is rejected, will that meter still need to be sampled within the 45-day period monthly sample?
- If another sample can be taken and analyzed within the 45-day period, no additional action is needed. But if there's a missed sample period that's going to occur, the operator should contact the AO and work with them to resolve the gap in the sampling.
- 3175.112(c)(4) and 3175.113(d)(1), discussion of changes, talks about membrane-tipped probes and sample separators. 3175.113(d)(1) one list some contaminants that can be found in the production gas, specifically hydrocarbon droplets and water. Much of the gas coming from the wells is at or below the Hydrocarbon Dew Point, HDP. This would mean that many of these wells have multi-phase flow

streams.

I'm gathering data to show the concentrations, HDP, and pressure at the sample point. The use of membrane-tipped probes would increase the accuracy and repeatability of sampling a multi-phase stream by keeping liquid out of the sample bottles and GCs. This could also be a safety issue. If you get too much liquid in a sample bottle and then heat it. APlus has submitted data on the benefits of membrane-tipped probes.

- The PMT welcomes comments with data on this issue.

- Location of sample probes seem to conflict with location of temperature thermal well in 3174.105 versus 3175.112(b), API 14.1, section 7.4.2 and API 14.2, part 2, section 6.5. Please confirm location in order of sample probe and thermal wells.

- In this question, there's a little bit of confusion because they're referencing both the oil standard of 3174 and the gas rule 3175. If the question is just referring to gas sampling, the recommendations of API 14.1 and API 14.3.2 only state the minimum and maximum distance requirements. As the thermal well ranges in the rule are within that limit, we don't understand the conflict. You could please provide more information on the concern in the comment period or on this call if you're available.

- For FMP's measuring production from wells first coming into production or from existing wells that had been refractured, including FMP already measuring production from one or more other wells, the operator must inspect the orifice plate upon installation and then every two weeks thereafter. In some instances where the FMP is at the end of a large gathering system for a large unitized area, an ongoing development is adding new wells or refracks virtually constantly, the two-week period may create an unnecessary burden if it is interpreted that each new well or refrack resets the clock. BLM should consider adding clarification to the rule regarding such situations.

- In this situation or situations that are specific to a particular location, the operator should seek a variance under 3170.60. This allows for operators to work with the local field office for field-specific issues that relate to rule compliance.

- Thermometer wells must be located in such a way that they can sense the same

flowing gas temperature that exists at the orifice plate. The operator may accomplish this by physically located the thermometer well or wells in the same ambient temperature condition as the primary device, such as in a heated meter house or by installing insulation and/or heat tracing along the entire meter run. When neither of these options is practical for various reasons, BLM should allow the installation to stand as-is as long as the possible error introduced is within the performance standards for the FMP.

- The rule requirements come directly out of industry standard practice, and those practices have been in place since the 1970s. The BLM would need additional information with data to overturn such a long standing industry practice.

- 3175.80(t)(1) requires horizontal meter tubes to have their sample probes located vertically at the top of a straight run of pipe in accordance with API 14.1. 3175.80(o) lists several requirements for thermal wells that does not require a similar vertical installation requirement. BLM should clarify that there are no industry standards to prohibit such an installation where the caps after the sample probe are offset by some degree relative to the sample probe similar to API MPMS 14.3.2 non-specifically prohibiting vertical meter tubes.

- The sample probe requirements come directly from the API recommendations 14.1, and there's no such recommendation for temperature probes. If you believe the orientation of the temperature probe should be prescriptive in the regulation, please provide data to support that requested change.

- 3175.80(a)-- the new rule language under this section may require operators to demonstrate compliance with the fluid condition requirements under the proposed 3175.80(a) specifically for quote, single phase, unquote, flow requirement. BLM should clarify how it expects operators to accomplish this.

- There's no change in the current rule relating to this requirement. The proposed rule simply moved the requirement from being within the table to actually within the regulatory text of subsection 80. All relevant API standards are developed for the use of meters in single phase flow. So regulatory language reflects that API standard. Multi-phase flow is not covered in this rule or permitted at FMPs.

- 3175.80(o)(2) gives operator to use insulation or heat tracing to comply and

requires the entire meter run to be insulated or heat traced. This requirement to insulate or heat trace should only apply to the section between the orifice plate and 12 inches downstream of the subject thermal wells.

- The, quote unquote, meter run the FMP encompasses is defined by the measurement area, as established in API MPMS 14.3.2. So the area of piping that is downstream of that area is not affected by the requirements of the rule.

- 3175.92-- verification and calibration of mechanical recorders E1. For verifications performed after installation or following repair, the operator must notify the AO at least one business day before conducting the verifications. Is this intended to address the next scheduled verification subsequent to initial installation or repair or the verification performed during the initial installation or repair?

- So 3175.92(e)(1) of the rule applies to notification of the installation or following repair. For subsequent verifications, the operator must notify within 72 hours before the verification. And we understand there's some confusion there, and the BLM will work to make the intent of the section clearer.

LUCAS LUCERO:You're muted, Casey.

- I apologize, thank you. 3175.92-- verification and calibration of mechanical recorders, f, volume correction. At the normal operating points tested result in a flow rate error greater than 2% and 2 MCF per day, the volumes reported on the OGOR and on royalty reports submitted to [INAUDIBLE] must be corrected beginning with the date that the inaccuracy occurred. If the error does not meet both conditions, 2% and greater than 2 MCF per day, is a volume correction still allowable?

- So the minimum requirement of the rule states that an error of 2% and 2 MCF a day on a monthly basis, the operator must edit the OGOR report. Any operator may elect to edit the OGOR based on lower thresholds, for example, less than the 2% or less than 2 MCF a day. But the rule establishes those minimum requirements.

- 3175.100-- electronic gas measurement, secondary and tertiary devices. Table 1 changes the frequency of routine verification for high and very high volume FMPs to every six months. BLM seeks comments on this change. There is a comment an

operator intends to continue to verify transmitters at the same frequency as plate inspections.

- I touched on this during my presentation, but the rule establishes those minimum requirements. Operators may exceed those minimum standards for their day-to-day operations without the BLM taking exception.

- What is the purpose of the volume statement? How does this statement contribute to ensuring accurate measurement of royalty quantities? Normally, measurement tickets are the official documents of record for royalty quantities. Consequently, volume statements are not currently used. It appears the added creation and retention of volume statements is redundant and unnecessary.

- This will go ahead and relate to the next question, which is very similar. I think there's some confusion there. If you look at that section in 3174, it states measurement tickets or volume statements. So it's is not an and. If you're using a run ticket, then that's fine. If you're using an electronic flow computer and creating QTRs or those volume statements, then you have those requirements, which basically it's stating that it has the same information. So as stated in the rule, the operator can use measurement tickets or volume statements. The rule reads as an or statement and not an and statement.

- Excellent, and the next question is the same answer as Stormy just stated is what is the purpose of the quantity transaction record? How do QTRs contribute to ensuring accurate measurement of royalty quantities? [INAUDIBLE] but we'll just--

- Yeah, the same statement.

- That's the same answer.

- OK, that finishes all the questions that were submitted before or during registration. So we're going to circle back to 3170 questions and bring Beth back on to answer questions that have been submitted during the presentation here. We do see that at least one person has their hand up. We will get to you relatively shortly here. Just be patient with us.

OK, Beth, the first question comes from Justin Richardson. Why are they introducing an additional well identifier when we already have API numbers, meter identifiers,

and BLM requires FMP numbers? This will affect all signage, [INAUDIBLE] programs, over reports, take identifiers, site facility diagrams, measurement data system programs, and drilling permits. There will be a significant cost associated to making changes to accommodate an additional well identification number. I.e., site facility diagram updates alone are approximately \$225,000 in additional costs, and signage is another \$14,000, not including labor.

- Thanks for the remark, and I would suggest that you submit a comment during the comment period regarding the costs and benefits. But API is the one that transferred the unique well identifier standard to PPDM in 2010. And honestly, we're just now catching up. So I don't know that we have much room for change there.

- OK, another question from Justin Richardson. Did they consider the volatility of oil market and its effect on the cost of equipment? Have they taken into consideration that tariffs or global market issues that are outside the producer's control? The current economic analysis in the proposed rule is based on \$50 per barrel or \$60 per barrel of oil and \$3 per MM or \$4 per MM BTU gas. This is not the current environment that producers are facing. How will they address this for economic feasibility?

- And we want to thank you for your question. Unfortunately, we don't have the economist on this presentation right now. And the rule was written about 16 months ago when the regulatory impact analysis was done and provided for the rule. So we recommend that you submit a comment to this effect, and we can address it in the comment period.

- The next question comes from Travis Newton. 3173.20-- why would we eliminate the need for seals on pipes? Wouldn't this be a back step in environmental protection?

- So the BLM only proposes to remove seals that have minimal impact on production accountability. The purpose of this rule is to ensure oil and gas production accountability and verification, and environmental regulation resides elsewhere. I hope that helps.

AMANDA

You're muted again, Casey.

EAGLE:

- Thank you, Amanda. The next question comes from Manuel Attensio. 3170.10 definitions-- US Well number. This new requirement and number will be a burden on industry. Please explain the reason for the new US Well number. Note, we have reached out to PPDM, and they have communicated that the PPDM association does not assign these identifiers. However, the standard specification is available to anyone at no charge, and regulatory agencies are at liberty to use it in their internal processes. The process involved in time needed to obtain well identifiers is up to each regulator and the process they have in place.

- Casey, I think that I've been notified that Manuel has his hand raised, so maybe we want to go to him.

- We'll go ahead and make sure you unmute yourself, Manuel, and then you can talk. Manuel, if you move your mouse on the screen, the mute button is in the bottom-left-hand corner.

MANUEL

Can you hear me?

ATTENSIO:

CASEY

Yeah, we can hear you.

HODGES:

MANUEL

ATTENSIO:

Sorry, I didn't see the button down there-- a little different setup. Justin Richardson reached out to the PPDM, and Trudy Curtis, the CEO, wrote those quotes that were put in my note that they do not issue the identifiers or the numbers. They developed the standard, which is the standard in their email that it's the API standard.

Basically, the state and the county are very similar or are identical to the API number. And so the API number should be the US number. And so I guess we're having trouble as industry understanding why we added this. If the US number is the API number, let's stick with the API number.

- Well the reason is because API transferred the rights to that. So I think it's probably a legal issue as to why we can't continue with an API number, but I will ask our solicitors.

MANUEL
ATTENSIO:

OK, and again, they do not issue the identifiers or unique numbers. They have only set up the standard on how you set that up. It's up to the individual state and federal agencies to determine how they want to implement this process. Our current process works. I think this is just another additional complex item that gets added to the mix.

- Well, as far as we can tell-- maybe you can correct us if we're wrong, the only thing that's happened here is the label change from API well number to Us Well number. The process is virtually identical.

- And so why wouldn't we leave it-- again, PPDM does not issue the numbers.

- No we realize that PPDM does not issue the numbers. However, they have purchased the right from API, and they now call them US Well numbers. So we're changing the label, and the process remains the same.

MANUEL
ATTENSIO:

Could they give the same right to any even data vendors to deploy the standard and I think there's going to be an opportunity for a whole lot of confusion here if this gets-- who's the custodian who takes care of it? Who issues that?

And I think our current process works, and the question would dovetail to the site security diagram. If we made a change on the site, and we removed a LACT unit or added an additional LACT unit and some tanks on a multi-well location, on our new site security diagram, would we then be required to replace all the API numbers from the previous installation with new US Well numbers?

- OK, as you stated, the number remains the same. So the only thing that would change would be the label from API well number to US Well number. And no, if that's the only change on a site facility diagram, we're not requiring the operator submit an amended site facility diagram.

MANUEL
ATTENSIO:

Yeah, I just don't see the need to add this US Well number. If it's still an API number, it's an API number. Again, I'll ask our solicitors, but the rights, unfortunately, don't belong with API anymore, and the PPDM has changed the name to US Well number.

- And we asked some API representatives to look into this. So I think some other folks are checking into it on the back side.

- OK, great, thank you.

CASEY Excellent.

HODGES:

MANUEL

ATTENSIO:

I think it just complicates everything out there and could add some additional oversight by other-- maybe even the district office and the AOs at the individual sites could start interpreting this different. So I just want to make sure we're on the same page.

- OK, thank you.

- All right, the next question comes from Javier Lapara. Has the PMT been established? Can you please remind users of how to submit an application to register/get an instrument approved?

- Javier, yes, the production measurement team was formed in October 2017, and virtually all the people who were on the current panel with the exception of Lucas are on the production measurement team currently. The BLM can accept applications for approval under the current regulation at this time. And BLM will be able to accept applications for approval under the revised regulation once they become final. BLM plans to provide non-binding guidance, for example, testing protocols or procedures, that will help to ensure that applications contain the information the PMT needs to process applications expeditiously.

We note that the guidance may be considered guidance documents subject to the requirements of Executive Order 13891, Promoting the Rule of Law Through Improved Agency Guidance Documents, published October 9, 2019. This executive order review process may delay issuance of the guidance.

- The next question comes from Travis Newton. I have experience with BLM grazing leases and understand the importance of not overgrazing areas. I believe this same methodology should be applied to all land. However, what is the environmental impact, for better or worse, that the BLM expects from the changes to inspections, reports, and seals? And this is a two-part question or multipart question. I'll read the whole question and then you respond, Beth.

If we see a degrading environmental impact, for example, removing seals, what is

the cost benefit analysis that quantifies the change. Given that natural resources are continuous across the land, what input will tribal nations have on these changes? If the BLM calculates CBA with a downgrade to environmental conditions, would the BLM implement a very wide land buffer between mining operations and the tribal land?

- Thanks, Travis, for your questions. Just the focus of this presentation has been on the regulatory language with regard to measurement of oil and measurement of gas and site security. I think your questions are focused on the environmental analysis that accompanies the rule, as well as the regulatory impact analysis, and you'll find those with the proposed rule. And we ask that you submit comments on those sections of the rule in the comment period.

Unfortunately, once again, we don't have those specialists on this presentation to answer the specific questions that you have. And also, just for your information, the BLM has started the process of tribal consultation on this rule already. Thank you.

- Thank you, Beth. Next question is going to be for Lucas. And I apologize if I mispronounce a name here. I know a lot of people on the call, but some I don't. This question comes from Murat Samis. Assuming no delays, what is the expected effective date of the rule?

- Sure, thank you. So we currently anticipate a final rule approximately Summer of 2021.

- Thank you, Lucas. All right, we're going to move. That gives our responses to all of the questions for 3170/3173. We're going to move on to some 3174 questions. So Chris, these questions will be for you. Sally Goodson asks why has chapter 18.2 been removed?

Industry data shows it to be more accurate than the current chapter 18.1, and also, it gives the impression that 18.1 is a better document, when actually, chapter 18.2 provides means for measurement that are safer than chapter 18.1. Finally, chapter 18.2 was added in the 2017 rules. Chris, are you there?

- Yeah, I forgot to unmute. Sorry about that.

- No worries.

- Enforcement of API 18.2 proved to be difficult, and BLM elected to be prescriptive in requirements. The BLM still allows the use of automatic tank cage and truck-mounted Coriolis meters in the proposed rule.

- Thank you. Sally has several questions here. Her next one is why has chapter 6.1 been removed? A common standard for systems provide uniformity across the industry, and the rules can require equipment add-ons.

- Listing specific items rather than referencing the entire document focuses inspection enforcement efforts and makes the rule easier to understand.

- Another question from Sally-- the rules do not have API MPMS chapter 5.2 for PD meters as a reference that allows PD meters. Should chapter 5.2 be added as a reference?

- I would welcome a comment on this and why inclusion of the standard would improve the rule.

- Brock Patterson asks 3174.41-- have recommended testing procedures already been published to www.blm.gov?

- Not yet.

- OK, another Sally Goodson question. API recently published an addendum to API chapter 6.1, API chapter 6.1, addendum 1, which defines normal operating conditions. This was done after a request from BLM during the 2017 comments. What is the data to back up the specified tolerances in the new rule?

- This addendum was not published when this proposed rule was drafted. We welcome comments on incorporation of this document.

- Mark Butler asks, does the two-year period for equipment approvals stated in 3174.60(e) apply to all FMPs, including very high volume FMPs?

- Yes, for the use of approved equipment, which is independent of the other requirements.

- The next question comes from Paul Furman. Can you please define the statement provided to AO upon request? Is this expected to be while standing at the LACT or at some point in the future?

- That could be either. If its data or information that's readily available on the location, it could be while standing at the LACT. Otherwise, it's documentation that's requested by a field office at the later date.

- Next question is from Tyndall Ellis. Please elaborate on the requirement for using a totalizer in the Coriolis transmitter. It is currently required for a Coriolis to generate pulses per unit volume of 8,400 pulses per barrel. These pulses are read by a flow computer to determine volume, and that volume is then used in successive calculations to determine quantity sold. How is the Coriolis totalizer to be used in this process? The full computer totalizer is linked to the 8,400 pulses and the run ticket volumes.

- This 8,400 pulse requirement is a minimum standard, so there's no requirement to use the 8,400 per barrel. Proving is conducted by totalize of pulses, and that's the reason this language.

- I think it's important to remember that there's a couple of things going on here, so there's a couple of parts to the statement. The 8,400 is a reduction that happened in the 2016 rule because in the proposed rule there was a requirement to have 10,000 pulses per barrel. But some larger Coriolis meters couldn't handle that, so that's where the reduction down to 8,400. But again, that's a minimum requirement.

So you have to produce at least 8,400 pulses per barrel, not required to do that. But the requirement to have the totalizer generate from the meter and not the flow computer is all the requirements about proving and all of that are based in the meter. And so that's why we want to make sure that that information's coming from the meter and not generated independently within the flow computer.

We have several situations in which it being generated from the flow computer can create issues for us if there's multiple flow computers because maybe you're selling from multiple locations on one unit. And we need to understand what's going through that particular meter. And that's the reason for that requirement.

- Thank you. The next question comes from Isaac Alvarado. 3174.152 states that the meter must operate within 10% of the proved flow rate. Coriolis meters can operate with a higher turndown ratio. Can Coriolis meters be exempted from this rule, or can language be added specific to Coriolis meters?

- This is related to meter proving, not turndown issue.

- OK, next question comes from Richard Britton. Would you be so kind as to revisit the question about the purpose of QTR. 3174.120(e)(1) requires that this document be generated by an ELM and be available for submission to BLM. Given the fact that the measurement ticket is normally the document of record, generation and retention of QTRs would appear unnecessary.

- I think that this is just a language issue. The reason that we've added this language about volume statements and QTRs is many companies differentiate their, quote unquote, measurement tickets, which they say are the handwritten tickets versus the outputs that come from their flow computers. And in many cases, or at least what was communicated to us, those are referred to as volume statements or quality transaction records, which is the same language that we use in API.

So if you look at the actual requirements relating to QTRs or volume statements, you'll notice that the requirement is basically that they contain all the same information that you would normally have in a measurement ticket. So this is not a-- I think it might be perceived or might be being read as an additional requirement, but this is basically stating that if you're not producing a measurement ticket because you're using a flow computer or some other calculation method and you're turning in these volume statements, that here's the minimum requirement for those. And in most cases, those are exactly the same as what would be in a measurement ticket.

So I hope that clears that up. But if it's not clear, if there's something that's confusing, or you're somehow construing this as an additional requirement that we're not intending it to be, then we welcome those comments so that we can address that.

- Thank you. We're going to move into 3175 questions. So Dave Curtis asks, section

3175.102 states, quote, the normal operating point is the mean value taken over a previous time period not less than one day or greater than one month, end quote. Does that mean any timeframe in between? If I want to average 6.327 days and call that average, is that acceptable?

- That's great, a great question. The language of the rule states that we would have to allow that. So we welcome or comments about that. The concept here was that someone couldn't just walk up and use the current pressure or temperature and say that that's the average, that they would have to use at least a previous day or a QTR that was developed over a 30-day period. But we welcome comments on that.

- The next question comes from Joe Sargent, who unfortunately had to leave the call. But we'll make sure we get an answer to him? How about ultrasonic measurement? Black Hills Energy made a request last year to the PMT to review ultrasonic AGA-9 for use as custody transfer. We were told it's on the list to review quarter one of 2021. Is that still true?

- So Joe sent this question in very early. Hopefully, maybe, he caught the part of my presentation where I addressed this. Ultrasonics are specifically included in the measurement section now as an item that can be reviewed and approved. I will say that that time frame, the first quarter of 2021, is definitely something that we're definitely not going to guarantee. It's going to have to do with when this rule gets published and when we start that process.

- The next question is a two part question from Alan Harris. I'll read the whole question, Stormy. 3175.40-- measurement equipment requiring BLM approval, (g) software used to capture and process the output from a GC. Will item (g) for a portable GC or only an online GC used on-site, or will it be for both? And the second question is what is the criteria the BLM will be needing from the software to be approved?

- Yeah, this is a great question, and hopefully I addressed some of this in my presentation. But this is just for the software, and that has to do with the calculation method. And the reasoning for this is we talked about how we've encountered a lot of different GCs that were working off basically homegrown software, and in many cases, just simply Excel spreadsheets.

And what we found is a lot of the discrepancies in BTE values that we were discovering had to do with the calculation not being conducted correctly or outdated GPA values being used. So this is the point of the review, and it's just a review of the software, not of the GC itself, of that calculation method. So hopefully that answers that. Muled again, Casey. You're going to have to work on that meeting.

- I just miss the button sometimes. All right, the next question is from Tyndall Ellis. What drives the orifice plate inspection frequency? I understand from the regulations that sand is a concern after new wells are brought online. Please elaborate on the other reasons for maintaining a monthly plate inspection on very high volume FMPs, particularly if there's a history of good performance.

- So as always, in our standard deal, we say we'd love to have any data about this. Basically, the timelines that we have, in this case, the monthly, has to do with the relative threat to royalty versus the bias that we know that would happen if a plate was to become dull during that period. So that's where those came from. That has remained the same from the previous rule, but we always welcome comments and information on that.

- Thank you. The next question comes from Justin Richardson. All GCs must be installed, operated, and calibrated under GPA 2261-19 incorporated by reference. See section 3175.30. GPA 2261-19 only has precision test standards, repeatability/reproducibility to C6+ or hexanes+. The example of the C9+ plus split of 60/30/10 is an example only, not the standard split. If we are required to sample to C9+ and our required to calibrate the GC, how does the BLM propose industry verify the C7, C8, and C9, and also define the splits of C6+.

- So a little bit of that I stated in the presentation. We tried to adjust addressed by switching to these minimum BTU values rather than those specific split requirements. But I will be honest that we we are really seeking comments on that, and we welcome any references that should be included about that operation.

- The next question comes from Alan Harris. 3175.40 measurement equipment requiring BLM approval, (h) water vapor measurement equipment and methods. The previous January 2017 regulation allowed the use of a chilled mirror device.

Many chilled mirror devices were purchased at large costs that met the requirement. This change of not allowing the current approved devices used now would be a great financial burden to endure after less than three years of service. Will chilled mirror devices that meet current 2017 regulations have to be recertified?

- So I'm not 100% about the term recertified there, but I do understand this concern, and not just to chilled mirrors, but to all equipment that's been bought or going to be purchased in the future about whether or not it'll meet the requirement. And I give this blanket statement that I'll give here, which is it's been often misconstrued about exactly what's included in this BLM approval process. This is really a verification.

So if you are purchasing a device from a manufacturer that has stated performance that's well within the requirements of the BLM and suited for this use, it is extraordinarily unlikely that it would not be approved. If that manufacturer submits the data and shows that the device performs, not even to what they're advertising, but within our standards, in our requirements, then it will be approved. The addition for this had related very specifically to laser detection devices that were not designed to be used in natural gas applications. If you purchased an automated chilled mirror from a manufacturer that was designed to be used in natural gas, short of nobody submitting that data to the PMT, it is in all likelihood going to end up on the approved list.

- The next question comes from Brock Patterson. 3175.60(c), equipment approvals. Does currently installed equipment need to be listed per 3175.41 within two years of effective date of the final rule?

- Only if it is a very high volume FMP category. So if it's one location before the rule becomes effective, it would only need to be on the approved equipment list if it's in the very high volume category or becomes in that category at a later time.

- Next question is from Justin Richardson-- GC software approval. What if the GC has a specific vendor software that is proprietary to that vendor's GC and the PMT does not approve the software but does approve the GC? What happens then?

- Again, that approval relates just to the software itself. Like I stated before, the

most common issue we've seen is that the calculations were not being carried out correctly or the default values were from previous standards and not the most up-to-date. And all of those things should be things that any GC software company would be able-- should update and would be able to update. So I guess the short answer to that statement is we would not allow outdated calculation methods to be used. You would have to update that to something that would be doing the calculations correctly.

- Thank you. The next question is from Mary Abens. Can water vapor content be reported as mole percent water, or does it need to be in terms of pounds per MMSCF?

- So we weren't very specific on that. The point is to be able to independently verify. And so however that value is reported, as long as we're able to carry out that calculation shouldn't be a problem.

- And then we have one last question here before we're going to go to at least one person has their hand raised. This comes from Jody Bertini. Inspection and sampling frequencies-- is the term month intended to mean calendar month, and if so, is the maximum time in appendix B intended to ensure the calendar time periods are not exceeded? Example-- previous inspection was performed on 8/25. Current inspection is due 9/25, not to exceed 10/9, which exceeds one calendar month.

- Yeah and that's exactly why we went to that table to make it very straightforward. So if the requirement states a month, then the maximum time in that case would be 45 days. So there should be no, oh, well, this month has 28 days, and this month has 31 days or whatever. That's exactly the reason that we went to those tables to kind of eliminate some of that confusion.

- OK, thank you very much. Jody actually raised their hand. Let's see if we can get Jody on to clarify on this question.

- Yeah.

CASEY

Unmute yourself, Jody.

HODGES:

JODY BERTINI: Yeah, Stormy, I guess what I'm saying is, per my example, if I tested late last month and it's due in the next month, the 45 days would exceed the next calendar month. Is that the intent?

- Yeah--

JODY BERTINI: Basically, in a year's time period on a month monthly frequency, if you went 45 days every test period, you would not have 12 tests in a year.

- Granted, and we understand, and we balance to that concern. And the reason for the 45 days is so that, in most cases, if an operator goes out there, and let's say they are going 30 days or a month, like in your example. If they're having an 8/25 samples, and they go back out there at 9/25, then they've still got to get that sample analyzed. And maybe there's an issue, and maybe they need to redo it. And that's the idea of giving some wiggle room there to allow for we went out there, and it wasn't flowing that day, or there's been some kind of shut in, or something like that, and there's some space.

Now, we appreciate that coming with allowing that flexibility is the possibility that somebody is going to abuse that and try to take it out to those maximums at every time. But that was the trade-off that we conducted for that.

JODY BERTINI: OK, great, thanks.

- Excellent. Thank you, Jody. We are going to move to online questions. Please feel free to still submit questions through the Q&A box. We will get back to those after we're done with all of the hand-raised questions. So the first one is Scott Ackley. Let's go and get Scott live. Scott, I know you've been waiting for a while, so thank you very much. Go ahead and unmute yourself to talk.

SCOTT ACKLEY: Oh.

- There you go.

SCOTT ACKLEY: Can you hear me?

- Yes.

SCOTT ACKLEY: OK, so with 3175.112 and 3175.113, I view those as relatively the same. Ones about

probes, one mentions separator. So in the BLM at 3175.113 states GPA's standard 2165.01 also states that for clean, dry streams above hydrocarbon dew point, the separator serves useful purpose. It could corrupt the sample.

BLM believes sampling separators create the risk that operators using the equipment will collect unrepresentative samples. The BLM is therefore proposing to prohibit their use for portable gas chromatograph sampling. My question is is the BLM's stance that the gas coming from the wells is a single-phase clean and dry pipeline quality gas?

- Yeah, so again, we have to go off-- I mean, we all understand reality and that usually there is other garbage associated with the gas flowing downstream. But all the standards that we use for GPA, API, and all that are built off the idea that this is a single-phase flow.

Relating specifically to GC separators, we got a lot of information from both sides about whether or not they were good in practice from the 2016 rule. And after all of those discussions, we came to the conclusion that the majority of people thought that they shouldn't be used. But we do welcome comments from that change that if you think there's value and you think that that value warrants keeping up with the cleaning process and all of that stuff to be able to use those, then we want to understand that, and we can definitely look at how to incorporate that. I don't know if that answered your question.

SCOTT ACKLEY: Yes, well, if we cannot use a separator, and most of all, whenever we have gathering, we've got to somehow keep liquid from entering either our chromatographs or our sample bottles. So if it's not a separator, then it would be a membrane-tip probe. So those--

- Some of those discussions-- and I'm sorry. I didn't mean to cut you off there. But some of those discussions about filters and membranes and all of those, when we got into the discussion about whether or not to allow the use of sample separators, we reminded everybody that filters are allowed downstream of the probe. They just can't be in the probe per the rule.

And again, we welcome comments on that. But the way the rule is written, they just cannot be in the probe that's within the pipe. So if there's a filter or something on

the GC, then that's allowed. And when we had those discussions, people were like, oh, well, that makes more sense to us than using these separator bodies. But we welcome comments on that.

SCOTT ACKLEY: And that would be a filter that contained a membrane would be allowed in the sample system?

- Yeah, it just cannot-- according to the rule, it just cannot be in the probe.

- Thank you, Scott.

SCOTT ACKLEY: Thank you.

- OK, the next question comes from Manuel Attensio. And Manuel, if you could raise your hand. We're asking for some clarification on this one. Your question is why are inconsistencies in the requirements for MDS in 3174.121 and 3174.40. the original 2016 3174.49 rule was modified, replaced with only the PMT approval. Why? So Manuel, go ahead and maybe expand on that a little bit for us.

MANUEL Can you hear me, Casey?

ATTENSIO:

CASEY Yes.

HODGES:

MANUEL Yeah, I did like the 3174.121-- it's a typo there-- and the explanation there. And you
ATTENSIO: have sections (a) that talks about the name and the version of the MDS system. The MDS system must comply with the record keeping in 3170.50. MDS must calculate according to API 11.1 and API 12.2, sections 9, 10, and 11, and then the other incorporated reference items there.

And then, (d) says MDS must maintain and preserve the raw data from the primary and secondary elements from the system as well as clearly show the edits and corrections made by the user. So I think that's really well written there, and I thought it was very similar to the original proposed 3175.40 rule that we had for the gas.

And then, all of a sudden, on the gas side, we saw that there were some corrections made. And the new language on 3175.40-- or 49 was replaced by 40, which requires

PMT approval. And there's only a one line referenced. It just says MDS systems, really, MDS must be approved by PMT. So I was just curious of why that was changed and why it was left vague on that side. Does anybody have a comment from the BLM on that?

- Yeah, and I think this would make a great comment. We look forward to a comment on it. The idea there initially was that a lot of those specific requirements would be treated as test procedures and that those would be moved to the PMT website. But I can understand why for you as an operator using one of these MDS that a more prescriptive section like what was in the 2016 rule and what is in 3174 would be valuable to you.

**MANUEL
ATTENSIO:**

I think it just clears it up. And I like the comment that was made on, I believe, the SCADA system is not a MDS system. I think, on the other side of the MDS systems are production allocation accounting systems that are used to report on OGORs. Those volumes they get reported on the OGORs may not match the actual QTRs and what the data that was in the MDS system because of royalty-free use or other allowables that the BLM allows for there.

So you really have to have the audit trail from an MDS system. I think opening this up and not addressing those production allocation accounting system and keeping them separate, just like you're keeping the SCADA system separate, is the appropriate way to keep a pretty level playing field with all of us operators out there. And also, some of us operators do not have the FMP points, and we really want to be making sure that those, I guess, agents operating on our behalf at the pads are utilizing the correct MDS systems to make those calculations.

And we would hate for a production allocation system to be used by a third party agent on our behalf, and then all of a sudden, be inked or be deemed as misreporting out there for the BLM. So I think a little bit more work on that is needed, and we'll provide comments from an operator standpoint.

- Yeah, absolutely. We appreciate it.

- All right, thank you for the clarification. All right, we have one more question that has been submitted in the Q&A, and nobody has their hands up. So just a warning, if you want to get a question in, really get it in fairly quickly here. The question that

was submitted comes from Jennifer Merkins.

With small companies unable to purchase a high volume measurement data system for determination of volumes, they utilize spreadsheets to determine volumes. How do they comply with pre-approved systems? What is the guidance for them? Stormy, do you want to--

- Yeah, sure. Well, first off, the general requirements in this case for an MDS most commonly is going to be a verification about how calculations are done and preservation of data. This isn't limited to you know name brand X can submit that data to the PMT. If an operator has their own process, and we and we know many companies do, they can submit that. They are welcome to do that.

We also remind you that on lower volume systems for very small operators who don't have a lot of high production wells, the performance requirements are much less, and therefore getting a system approved for them would be a much more lenient approval. So hopefully, that answers that question.

- All right, I see Isaac Alvarado has raised his hand. So Isaac, when you get called on, please unmute yourself.

ISAAC

OK, can you hear me there?

ALVARADO:

CASEY

HODGES:

Yes, so I just want to get a clarification on a question I asked, 3174.152, which is the meter proving runs. So part of the rule says whatever the flow rate pressure, temperature, and API gravity the meter is proven at would become the new normal operational points, and the unit would have to maintain operation within 10% of that defined value for flow rate and pressure. So the question I had was related to Coriolis meters and, say, can they have a higher turndown ratio? And the answer was, well, this is about meter provings and not turndown ratio. So my question is does that mean that it doesn't have to operate within 10% or the new normal operation range?

- OK so what we're stating there is that that 10% range is relative to the meter factor that is generated from that proving. So let's just stick with pressure just for the sake of argument. So if you prove at a particular pressure and you produce a

meter factor, then that meter factor would be good for 10% above or below that pressure before it would require an additional prove.

Now, there's a couple of ways you can handle that. One is if you have something that varies a lot in pressure, let's say, or flow rate, or whatever, you could do multiple provings at those different pressures or different flow rates and have different meter factors that would be used when you enter those ranges. And then, we did provide a provision that said for meters like a Coriolis, if during those approval processes they can prove a linearity to the meter factor, then it's possible that we would accept that and allow the meter to change the meter factor based on that linearity.

But for the way the rule is written right now, for the automatic approval, you could do a multi-point prove. And their specifics given in there for how much the meter factor can vary between two different points and all of those things for those different values. Does that help answer that question?

ISAAC

Yeah, so in essence, we could ask for an exemption due to the meter linearity.

ALVARADO:

- Well, yeah, in that particular case, I would say it would be most likely that whoever produces that that Coriolis meter that you're using would request that when they were seeking approval for that meter because that would be part of the conditions of approval for that meter when it gets on the approved equipment list. But yes, an operator could do that as well. Yeah, but so if you had something that was varying a lot and you didn't want to use those multiple proving points, then you'd have to seek another way to do that, either through linearity or some kind of variance if it was very specific to a certain condition.

ISAAC

That makes sense.

ALVARADO:

- Excellent. Thank you--

BETH

I just want to reiterate that we anticipate that issue to be resolved in the approved equipment process, just for your information.

POINDEXTER:

- All right, I don't see any more questions or comments coming in. I do want to

reiterate that if you asked a question here or commented here, it was recorded, but it is not an official comment or question. Comments need to be submitted by mail, hand delivery, or online at regulations.gov. And we'll give maybe about 10 or 15 seconds here for anybody to ask a question if you're typing it in, go ahead and raise your hand so that we know you're getting a question in.

- I wanted to make good just a general statement while we're waiting for some more questions come in. Well, Mark put his hand up. He's typing something in, I bet.

It is very important to us that we not only get your guys comments, but data and recommendations to back that up. And we state that because part of what we have to do when we go to finalize this rule is we've got to show how we got to where the final rule needs to be. So even if you've brought up a great point in this outreach and it's something that we think we should change and it makes sense what you said, without that comment, it's hard for us to justify the logical outgrowth about how we got to that final point.

So we need those comments from you guys and the data to show, hey, this is why we're changing this. This is why this is a good thing, not just for the industry but for the American public, and it shows that the BLM can still perform their goals of production accountability. And that's what we need. And so I just don't want to minimize at all the importance of your guys' comments to us.

- Thank you, Stormy. OK, Mark Butler has submitted a question here. Will the online comments channel allow us to submit data as attached files? Beth, do you want to take that one?

- The answer is yes. We've actually received quite a bit of data already from one submitter. So yes, feel free. You may have to submit it two or three times, depending on the size of the data file. But we've received Excel spreadsheets today.

- And, Beth, kind of a follow-up on that. Is there any particular file types that we're looking for?

- No, I would say the easiest thing for us to manage, though, is probably Excel or CSV. And if we need proprietary software to be able to access the data, that's almost a non-starter, FYI.

- Thank you. OK, we'll give just another 10 seconds or so here for somebody to raise their hands if there's any more questions.

- While we're waiting, could we possibly jump to the slide at the beginning that has the websites again, just so people can see the PMT website? I think it's like maybe slide three or four.

- We've got a raised hand there too.

- There we go. Thank you.

- Yeah, so as folks are maybe thinking of other questions, I wanted you to be able to see again where the transcripts will be posted at in the third bullet here.

- Excellent, we do have a Stephen Geiger you've got your hand raised. Go ahead and unmute when you're called upon.

STEVEN Hello, can you hear me?

GEIGER:

CASEY Yes.

HODGES:

STEVEN I'm 3174.110(e). Why are you requiring a meter verification?

GEIGER:

- Steven, can you maybe move a little closer to your microphone or something? I think we had a little trouble hearing you.

STEVEN OK, how about now?

GEIGER:

CASEY That sounds better.

HODGES:

STEVEN OK, I'm referring to the 3174.110, paragraph (e). Zero meter verification must be conducted during the proving process. Why are you requiring verification if we are proving the meter? What's your thought process on that?

GEIGER:

- I just want to clarify we are talking about doing a zero verification?

- Yeah, [INAUDIBLE].

**STORMY
PHILLIPS:**

OK. Sorry, give me one second-- just looking at it here. Make sure I'm not speaking out of turn. Yeah, the intent here was just to clarify the requirement in 2116 about when zero verification should be conducted. And the proposed rule is proposing to have that zero verification be part of the proving process. So if you feel that that's an erroneous addition, we would just need a comment to explain why you don't think that that's necessary. And we welcome any information on that.

**STEVEN
GEIGER:**

Thank you.

- Thank you, Steven. Any other comments and questions from the attendees? Yes, we've got Jody Bertini has raised his hand again. When you get called on, unmute yourself, Jody. There you go.

JODY BERTINI: All right, just one quick question with respect to display of the software version on flow computers. Some flow computers have both software and firmware. Is the intent here to display the version that contains essentially the calculations and integration routines?

- Yeah, Jody, we've actually even been discussing this with some flow computer manufacturers, and they've talked about how they might modify some of the software version or firmware version numbers to be able to easily indicate the part of the version that holds that calculation. So the only thing that the BLM's concerned about is the part of the firmware that does the actual calculations. And the way that we describe a model number or a software number is limited to the parts of the number that affect that, kind of the same thing that you saw in the 2016 rules relating to pressure and temperature measurement devices that the part of the model number we're concerned about is only the part that would affect the measurement, and other numbers that don't have anything to do with that, that has to do with connections, aren't included in that. So we are trying to nail that down, but that would be the concept there is that the part of the display that relates to that calculation is the only part that would be required to be shown.

JODY BERTINI: OK, great, Stormy. That helps a lot.

- Thank you, Jody. All right, do we have any more questions? Again, we'll give about 10 seconds or so for people to raise their hand. All right, not seeing any questions. We'll go ahead and kick it back over to you, Lucas.

- All right, well, thank you all. I really want to pass along appreciation to the attendees. Thank you for sticking with us for the last three hours. Thank you to our presenters. And as I mentioned, we will be working to get the transcripts uploaded to the website listed here in the third bullet. And we'll try and get it posted there as quickly as possible. And again, thank you so much for your time and your participation, and we will go ahead and wrap up our session early today. Thank you.