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Acting Director Michael D. Nedd
Bureau of Land Management
U.S. Department of the Interior
1849 C St., NW, Room 2134 LM
Washington, DC 20240

Attention: "Waste Prevention, Production Subject to Royalties, and Resource Conservation; Delay and Suspension of Certain Requirements," 82 Fed. Reg. 46,458 (Oct. 5, 2017) (RIN 1004-AE54)

Dear Mr. Nedd:

With this letter, API supports the action that the Bureau of Land Management (BLM) describes in the above-referenced proposed rule, namely the suspension or delay of certain requirements in the final rule entitled "Waste Prevention, Production Subject to Royalties, and Resource Conservation," 81 Fed. Reg. 83,008 (November 18, 2016) ("2016 Rule").

API is a national trade association representing over 625 member companies involved in all aspects of the oil and natural gas industry. API's members include producers, refiners, suppliers, pipeline operators, and marine transporters, as well as service and supply companies that support all segments of the industry. API member companies are leaders of a technology-driven industry that supplies most of America's energy, supports more than 9.8 million jobs and 8% of the U.S. economy, and since 2000 has invested nearly $2 trillion in U.S. capital projects to advance all forms of energy, including alternatives. API member companies conduct drilling and production operations on lands administered by BLM that are subject to the requirements of the 2016 Rule.

I. BLM has the authority to delay and/or suspend provisions of the 2016 Rule as it has proposed

1) BLM's proposed action is consistent with applicable law

BLM possesses the legal authority to suspend or postpone provisions of the 2016 Rule through the familiar notice-and-comment rulemaking procedures of the Administrative Procedure Act

(APA).[1] BLM can revise its regulations pursuant to the APA, which "makes no distinction . . . between initial agency action and subsequent agency action undoing or revising that action."[2] As particularly relevant to the rulemaking at issue here, "[a] change in administration brought about by the people casting their votes is a perfectly reasonable basis for an executive agency's reappraisal of the costs and benefits of its programs and regulations."[3] So long as "the agency remains within the bounds established by Congress, it is entitled to assess administrative records and evaluate priorities in light of the philosophy of the administration."[4]

Through suspension or postponement of requirements in the 2016 Rule, BLM will "remain[] within the bounds established by Congress."[5] As relevant here, BLM's authority under the Mineral Leasing Act of 1920 (MLA) extends to the prevention of undue waste and conservation of federal mineral resources.[6] By finalizing this action, BLM will not exceed the bounds established by Congress. Indeed, this action is necessary for BLM to avoid much of the agency's significant overstepping of those bounds in the 2016 Rule. As API discusses at a high level below and detailed extensively in its comment letter filed when the 2016 Rule was proposed, and as many parties have detailed in ongoing litigation challenging the 2016 Rule, the 2016 Rule exceeds BLM's authority to prevent undue waste and conserve federal resources, interferes with the authority provided to EPA and the states under the Clean Air Act, impermissibly alters longstanding principles defining the concepts of waste and avoidable loss, and is based on a fundamentally flawed evaluation of the 2016 Rule's costs and benefits.[7]

By suspending or postponing provisions of the 2016 Rule, BLM will avoid imposing requirements that are beyond the bounds established by Congress. Furthermore, suspension or postponement of provisions of the 2016 Rule could reduce waste of federal mineral resources, because, as also detailed in API's comment letter, the 2016 Rule's requirements could require the shut-in of wells and result in premature and unnecessary abandonment of federal resources.[8] Also, frequent shut-ins can lead to reduced well productivity and potential reduction in total recovery from a well, thereby increasing waste rather than preventing waste. Finally, the postponement and suspension will provide BLM an opportunity to review and reconsider the 2016 Rule to determine what further action is necessary pursuant to BLM's "reappraisal of the [Rule's] costs and benefits" and of the agency's "priorities in light of the philosophy of the administration."[9]

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[1] *See* 5 U.S.C. § 553 (procedural requirements for rulemaking).

[2] *FCC v. Fox Tel. Stations, Inc.*, 556 U.S. 502, 515 (2009).

[3] *National Ass'n of Homebuilders v. EPA*, 682 F.3d 1032, 1043 (D.C. Cir. 2012) (Garland, J.) (quoting *Motor Vehicle Manufacturers Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 59 (1983) (Rehnquist, J., concurring in part and dissenting in part)).

[4] *Id.*

[5] *Id.*

[6] 30 U.S.C. §§ 187, 225.

[7] *See generally, e.g.*, API, "Re: Bureau of Land Management's 'Waste Prevention, Production Subject to Royalties, and Resource Conservation' Proposed Rule at 81 FR 6616 (February 8, 2016)" (filed Apr. 22, 2016) ("API's comments on the 2016 Rule as proposed") (attached and incorporated by reference); Brief in Support of W. Energy Alliance and Indep. Petrol. Assoc. of Am.'s Pet. For Review of Final Agency Action, *Wyo. v. U.S. Dep't of the Interior*, No. 2:16-cv-00285 (D. Wyo. Oct. 2, 2017); API's Amicus Brief in Support of Pets., *Wyo. v. U.S. Dep't of the Interior*, No. 2:16-cv-00285 (D. Wyo. Oct. 10, 2017) (lodged).

[8] *See* API's comments on the 2016 Rule as proposed, Attachment A (comments on BLM's benefit-cost analysis for the 2016 Rule).

[9] *National Ass'n of Homebuilders*, 682 F.3d at 1043.

2) The proposed action is appropriate and necessary particularly for those provisions that are outside BLM's statutory authority

As will be described in more detail below, API strongly urges delay and suspension of sections of the 2016 Rule that constitute an improper air emissions control regime. In this regard, API reiterates our comments on the 2016 Rule that while BLM has the authority under the MLA to limit venting and flaring where necessary to prevent undue waste and conserve federal mineral resources, BLM lacks authority to adopt an emissions control regime for the purpose of protecting air quality. First, the intent of the MLA in addressing "waste" does not extend to regulation of air quality and leaks. Second, the MLA does not set forth a mandate to regulate leaks or air quality, but instead requires leases to contain language to reasonably prevent waste. Third, the MLA's prevention of waste provision imposing use of "reasonable precautions" does not give the BLM unlimited authority to adopt air quality control programs. Nor does the prevention of waste provision grant BLM the authority to dictate technology, equipment types, or leak detection and repair (LDAR) programs operators must use to prevent leaks.

Such measures fall within the exclusive province of the Environmental Protection Agency (EPA) and the states under the Clean Air Act.[10] Under the Clean Air Act Congress carved out no role for BLM in setting air quality or emissions standards or in determining who is regulated or to what degree. Neither BLM's authority to prevent undue waste of oil and gas under the MLA, nor its mandate to ensure that public lands are managed to protect "atmospheric" resource values under the Federal Land Policy and Management Act of 1976,[11] authorize BLM to establish an air quality regulatory regime in place or contrast to the Clean Air Act or to regulate emissions as though it were EPA or the states. Accordingly, API requests that §§ 3719.101, 102, and 201-305 of the 2016 Rule be delayed and suspended pending a determination that these sections are outside the authority of BLM.

For all other sections of the 2016 Rule, API agrees that the 2016 Rule imposes potentially significant compliance costs on operators without providing corresponding benefits, including reduction of waste of public resources. API further contends that these requirements impermissibly abandon the fundamental economic principle of waste prevention in the oil and gas leasing context. Under long standing principles of oil and gas law, and as reflected in the MLA, BLM's existing regulations, and in NTL-4A, "waste" (and the related concept of "avoidable loss") occurs when a lessee commits a preventable loss of oil and gas the value of which exceeds the cost of avoidance. This long-established standard is a fundamental term of all oil and gas lease contracts on which lessees are entitled to rely. Significantly altering the concept and application of this standard not only is inconsistent with Congressional intent, but also risks materially breaching all existing lease contracts and rendering new lease contracts illusory. Accordingly, BLM's proposed delay and suspension of the 2016 Rule is appropriate so that the agency can determine what revisions are necessary, as well as to avoid imposing compliance costs on both industry and BLM during that review for requirements that may be substantially revised or eliminated.

[10] 42 U.S.C. ch. 85, subch. I § 7401 et seq.
[11] 43 U.S.C. ch. 35.

In this proposed rule, BLM specifically asked for comment on "the appropriate length of the proposed suspension and delays" and indicated that the agency "would like to know whether the period should be longer or shorter (*e.g.*, six months, 18 months, or 2 years)."[12] API recommends that an extension until January 17, 2020, would be more prudent to provide adequate time to conduct required tribal consultations and to propose, finalize, and make effective any revisions to the 2016 Rule.

API also recommends that the proposed delay and suspension should be finalized as soon as possible. The 2016 Rule imposes significant new requirements beginning on January 17, 2018, and operators must begin to expend significant resources on accounting system upgrades, recordkeeping, inspections, equipment and planning well in advance of that date. If BLM is unable to finalize and make effective the delay and suspension before January 17, 2018, API requests that BLM issue guidance to operators and field offices to provide appropriate relief with respect to implementation of the 2016 Rule.

In the Regulatory Impact Analysis for the 2016 Rule ("2016 RIA"), BLM estimated that the requirements of the 2016 Rule would impose compliance costs, not including potential cost savings for product recovery, of approximately $114 million to $279 million per year (2016 RIA at 4). Key components of the 2016 Rule discussed further in the body of this letter include: semi-annual LDAR programs; a capture target program to reduce flaring at oil wells; and the replacement of pneumatic controllers and pumps, storage vessels, and liquids unloading. As explained in detail in API's comments to the 2016 RIA, incorporated into our comments on the 2016 Rule as proposed, BLM overstated the benefits and underestimated the costs from the 2016 Rule. In the RIA that accompanied publication of the proposed rule that is the subject of this letter, BLM estimated that this proposed rule would result in positive net benefits. Compliance activities would be shifted to the future, due to the suspension and delay of the 2016 Rule's requirements, and start in mid to late 2018 as operators prepare for BLM's proposed new compliance deadline of January 17, 2019. In view of the fact that many of the provisions of the 2016 Rule are to be re-examined by BLM, this finding described in the RIA for this proposed rule provides further support for the delay and/or suspension of portions of the 2016 Rule.

In addition, it is important to note that any identification of a reduction in the social cost of methane as a benefit supposedly to result from the regulation of methane sources under the 2016 Rule is not an outcome realized by operators subject to regulation under the Rule. In their case, the consequences of the 2016 Rule fall entirely on the cost burden side of the ledger. API will be providing its estimates of the costs attributable to the 2016 Rule and to any modifications to be proposed in a revised rule when it is published in the Federal Register for notice and comment. However, with this letter, we also wish to state that any attribution of an economic benefit to a reduction in the social cost of methane is highly speculative, not sufficiently peer-reviewed, and ultimately not suitable for policy applications. The issues associated with the estimation and use of the social cost of methane include: differences in the way methane emissions was included in the models used to develop the concept; significant differences in the damage functions between the models; issues with the averaging approach used to synthesize the results; the inclusion of an unjustifiably low discount rate given the short atmospheric lifespan of methane; and the inclusion of global benefits rather than domestic benefits in the rationale for attributing such benefits to reduction of methane. In short, it is a criterion that is not based on the best available

[12] 82 Fed. Reg. at 46,460.

science and economics, and inappropriate for justification of administrative rulemaking, and API supports the cessation of its use as described in the Presidential Executive Order 13783 of March 28, 2017 entitled "Promoting Energy Independence and Economic Growth" (E.O. 13783).

Finally, suspension and delay of certain provisions of the 2016 Rule as proposed in BLM's action to which this letter responds will further the objectives of cooperative federalism described in E.O. 13783. Suspension and delay of these provisions of the 2016 Rule as described in more detail below will enable the BLM to review the equivalent laws and regulations of the states to regulate waste of oil and natural gas resources, to pursue opportunities to avoid regulatory conflict or redundancy, and to adopt rules to facilitate development of these resources as provided under the MLA.

II. Recommendations with respect to specific provisions in the 2016 Rule

For the following requirements in the 2016 Rule with January 2018 compliance dates, this proposed rule would temporarily postpone the compliance dates until January 17, 2019:

- Gas capture requirement (§3179.7);
- Measuring and reporting volumes of gas vented and flared (§3179.9);
- Determinations regarding royalty-free flaring (§3179.10);
- Equipment requirements for pneumatic controllers (§3179.201);
- Requirements for pneumatic diaphragm pumps (§3179.202);
- Storage vessels (§3179.203); and
- Operator responsibility (Leak Detection and Repair (LDAR)) (§§3179.301 to 3179.305).

The following requirements in the 2016 Rule that are currently in effect would be temporarily suspended until January 17, 2019:

- Waste Minimization Plans (§3162.3-1(j));
- Well drilling (§3179.101);
- Well completion and related operations (§3179.102);
- Storage Vessels (§ 3179.203);
- Downhole well maintenance and liquids unloading (§3179.204);
- Equipment leaks (§ 3179.301-305).

For each above listed section, API has provided previous comments and offers additional explanation below supporting the proposed delay or suspension of compliance dates. For each of these sections additional review and analysis must be undertaken by the BLM. These sections suffer from a number of flaws including but not limited to lack of statutory authority, infeasibility, and undue burdens on the regulated community. API encourages that as the BLM reconsiders the 2016 Rule during the period of suspension, the BLM considers the following section-by-section comments. For each and every section delay and suspension is warranted. Also, in this letter, we are requesting delay and postponement of §§ 3179.6 and 3103.3-1 in addition to the sections noted above, and as earlier stated, we are requesting an extension of the period of postponement until January 17, 2020, to provide BLM adequate time to conduct required tribal consultations, propose, finalize, and make effective any revisions to the 2016 Rule.

1) § 3103.3-1 – Implementation of the provision to allow BLM to increase certain lease royalties should be delayed or suspended

The 2016 Rule revised the regulations at § 3103.3-1, which govern royalty rates applicable to onshore oil and gas leases, and authorizes BLM to set the royalty rate on competitive leases issued after the effective date of the Rule at not less than 12.5%. BLM says it would announce any change prior to the effective date, and would provide for a public comment period. Increased royalty rates will further disadvantage federal leases when compared to State or private leases due to the additional cost of securing permits to carry out operations on federal leases, coupled with costs for compliance with other federal regulations that do not apply to operations on other leases. Invoking variable lease royalty rates would result in unintended consequences toward commingling allocations and approvals (CAAs). Under BLM's Subpart 3173 rule replacing Onshore Oil and Gas Order Number 3, effective January 17, 2017, BLM proposes as a general rule to only authorize CAAs if properties proposed for commingling (single federal leases, unit participating areas, or communitization agreements) "have the same royalty rates and royalty distributions." (§ 3173.14 Conditions for commingling and allocation approval (surface and downhole)). Under that circumstance, properties with variable royalty rates apparently would not be eligible for CAAs. This would result in significantly increased costs and environmental consequences in situations where royalties greater than 12.5% could be imposed, and would effectively eliminate many situations in which CAAs could be approved. API requests delay or suspension of this section of the 2016 Rule until the BLM can re-examine the potential disincentives from this section on new leasing of federal minerals and the impediments that it would present to approval of CAAs, and strongly encourages BLM to revoke this section in a revised Rule.

2) § 3162.3-1(j) – BLM underestimated the burden of the Waste Minimization Plan required for each oil well under the 2016 Rule, and API agrees this requirement is not necessary

BLM should review the Waste Minimization Plan requirement because it is more burdensome than BLM originally estimated without providing any meaningful benefits, and suspension of the requirement is appropriate during such review because of the likelihood that the requirement will be eliminated. There are a number of reasons why the plans are inappropriate. The average BLM Application for Permit to Drill (APD) approval time in some regions can be up to over a year. BLM field office review of Waste Minimization Plans will only extend review times for APDs and increase the administrative burden on BLM staff. Much of the data required for the plans is not in the possession of the production facility owners or operators but the gathering company and is confidential business information. Because several state agencies have laws to prevent gas waste that are duplicative of the 2016 Rule, BLM's requirement of a Waste Minimization Plan in the 2016 Rule is redundant with or unnecessary because of existing state regulations. Accordingly, submission of the plans should be suspended pending revision of the 2016 Rule.

3) § 3179.6 – Implementation of the provision of the 2016 Rule restricting when gas can be vented should be suspended or delayed while the agency considers an alternative approach in a revised 2016 Rule

In addition to the sections of the 2016 Rule that BLM has identified for delay or suspension, § 3179.6 of the Rule should also be suspended. The limitations on venting in § 3179.6 fall outside

BLM's regulatory authority because its broad restrictions on venting do not prevent waste or avoidable loss. In many cases, the flaring of gas during drilling can create *additional* waste because it cannot be captured or sold, there is no way to reinject the gas, and natural gas is required to operate the pilot on the flare. Furthermore, § 3179.6(c), which requires all flares or combustion devices to be equipped with an automatic ignition system, incorrectly assumes that such systems may be installed and will operate effectively on every flare or combustion device, which operating experience shows is not the case. There are also situations where flaring simply is not feasible due to technical or operational safety reasons in addition to those identified in this section. Such activities should be exempt from the requirement to flare instead of vent. Instead of trying to identify each particular case, API recommends delay or suspension of this section to allow venting until it can revise the 2016 Rule in a way that is informed by technical feasibility, operational safety considerations at the drilling or production site, and the agency's authority to reduce waste and incentivize recovery of produced gas.

4) § 3179.7 – Implementation of the Gas Capture Requirement in this section of the 2016 Rule should be suspended or delayed while the agency considers an alternative approach to reduce waste and to incentivize recovery of produced gas

API supports suspension of this section of the 2016 Rule. We agree with BLM that it is unnecessarily complex and that gas capture percentage requirements could be obviated through other BLM efforts to facilitate pipeline development. To support this BLM effort, API notes that in the third quarter of 2015, two federal decisions resulting in delay or denial of the requested ROW accounted for 6% of the flaring in the state of North Dakota.[13] Furthermore, BLM has not adequately evaluated the consequences of imposing arbitrary flaring limits. Limits have multiple adverse effects described in detail in our comments on the 2016 Rule as proposed that must be considered both in the cost of implementation and the benefits of capture, including any revised RIA. In addition, operational changes to achieve compliance with these limits could increase waste, rather than prevent it, which is contrary to the stated objective of the 2016 Rule. In an area constrained to make 100% gas sales, wells would be required to shut-in repeatedly (or otherwise cease production if the lease does not allow for shutting in an oil well) until sufficient gas infrastructure is in place or where there are capacity constraints, rights-of-way issues, emergencies or during third party maintenance to avoid flaring. Shut-in events have the potential to impact the productivity of low permeability hydraulically fractured reservoirs due to various reservoir and mechanical causes. These effects, either individually or combined, have often resulted in a negative effect on productivity of the well and/or an increase in operating costs. This could ultimately lead to suspended production and the royalties on that production, and wells being shut in (or otherwise cease producing) beyond the term of the lease or leases in question.

[13] Two examples include the Hawkeye Pipeline, which took more than 3 years for BLM approval, and Lost Bridge Pipeline, which was held up by the Tribes and denied by the U.S. Forest Service. We understand that in the third quarter of 2015, these two ROW issues accounted for 6% of the flaring in the state of North Dakota.

As API will show in comments and recommendations it will provide in response to BLM's publication of a proposed revision to the 2016 Rule, a duty of an operator to capture gas relates to whether the gas production in question is or is not "waste." In general, statutes and regulations prohibiting waste provide for consideration of whether it makes economic sense for a prudent operator to recover and sell the lost production. Although the term has been variously defined since the inception of the oil and gas industry by state statutes in a variety of contexts, for the purposes of venting and flaring, "waste" is generally defined as a "preventable loss [of oil and gas] the value of which exceeds the cost of avoidance." Because the gas capture requirement is closely tied to whether the operator has a duty to recover the production, which is in turn tied to what is treated as unauthorized loss or waste, and because the gas capture requirement improperly upends longstanding principles regarding the definition of waste, API requests that this provision of the 2016 Rule be suspended until these issues can be resolved through development of a revision to the 2016 Rule.

5) § 3179.9 – This section of the 2016 Rule, pertaining to measuring and reporting volumes of gas vented and flared from wells, should be suspended or delayed until these requirements can be re-examined in the context of a revision to the 2016 Rule

API agrees that the requirement on operators to estimate (using estimation protocols) or measure (using a metering device) all flared and vented gas will impose significant costs, in part because the variability of flow rates to flare systems poses such a challenge to accurate measurement over the possible range of flow.

As we stated in the review of BLM's Regulatory Impact Analysis that accompanies our comments on the 2016 Rule as proposed, BLM's estimates for the costs of installation of equipment to measure gas flow to flare systems are unrealistically low. Flare gas flow rates can vary widely from low levels during routine, continuous operation to relatively high levels during upset conditions. This flow rate variation poses a challenge to accurate measurement over the possible range of flow. BLM's analysis did not include the costs of installation of the flare meters, underestimated the costs of their operation, and significantly underestimated the number of meters that would be required to be installed under the 2016 Rule. In the 2016 Rule, BLM also did not account for the costs of equipment necessary to estimate flared gas by conducting gas-to-oil ratio tests on a monthly basis.

The cost of metering systems potentially to be required by the provision, costs associated with engineering and installation of any such systems, plus costs associated with overhead for documentation, regulatory filings, and general maintenance of the meters mean that suspension of the requirements of this provision is appropriate until BLM has re-examined its requirements for measuring and reporting gas volumes in the context of a revision to the 2016 Rule, and additionally considered the production reporting requirements in the various states in which BLM lands are located. This provision is particularly troubling as it creates a requirement operators cannot comply with because there is no current technology that can reliably measure low pressure, low volume, fluctuating gas flow. Much more discussion with industry must take place before requirements around measuring are proposed and/or adopted.

6) § 3179.10 – Determinations regarding royalty-free venting or flaring under the regulatory framework that preceded adoption of the 2016 Rule should be extended until a revision to the 2016 Rule is adopted

API agrees with BLM that terminating pre-existing flaring approvals in January 2018 would be premature and disruptive and would introduce needless regulatory uncertainty for operators with existing flaring approvals. BLM is therefore proposing to extend the end of the transition period provided for in § 3179.10(a) to January 17, 2019. Such an extension is necessary pending review of the 2016 Rule to ensure that previous approvals are not prematurely terminated when the regulatory requirements to be applied may be substantially revised, and, as noted above, API suggests that an extension to January 17, 2020 is appropriate.

This extension is also necessary because the previous BLM approvals should be made permanent in any revision to the 2016 Rule. Holders of existing leases are entitled to rely on the existing standards and approvals as they were material inducements to entering into their leases and investing significant capital to develop such leases. Disallowing such approvals could constitute a breach of existing leases and reduce the attractiveness of investing in the production of federal leases. Accordingly, lessees with approved or pending sundries or approvals at the time of the adoption of the 2016 Rule have the right to have their requests or approvals "grandfathered" and considered under the regulatory framework that existed prior to the adoption of the 2016 Rule, relying on NTL-4A, which represents the longstanding concepts of "waste" and "avoidable loss" that were in place when the leases at issue were acquired and the sundry requests made.

7) § 3179.101 – The section of the 2016 Rule addressing flaring and venting during well drilling presents impractical options for operator compliance and should be delayed or suspended pending promulgation of a revision to the 2016 Rule that may not include this section

Drilling operations do not lend themselves to capturing and selling natural gas, to providing field gas to support operations, or for capture and re-injection because there is no saleable quality or stable quantity of gas available from drilling a well that can be tied into a gas gathering system, used to support field operation, or is practical to re-inject. Because of the impracticality of these options, the requirement in the 2016 Rule to flare gas means that virtually all drilling operations will require some type of flare system.

BLM has failed to consider the technical feasibility of the requirements. Flares may be used on drilling wells in three situations:

(1) The first is during air or nitrogen drilling operations where no drilling fluid is used due to low formation pressure and the potential for lost circulation.

(2) The second is when drilling fluid is used, but the design weight of the drilling fluid is underbalanced with respect to formation pressure.

(3) The third situation is when dangerous concentrations of hydrogen sulfide (H_2S) are possible, and venting in any quantity cannot be tolerated due to safety concerns for work crews and any nearby public.

In the first two situations, due to underbalanced drilling conditions some gas can be encountered, but these techniques are mainly used to prevent lost circulation in depleted under-pressured formations or in tight formations such as shale, with low natural permeability that inhibits

formation flow into the wellbore. In all three situations, there is frequently insufficient gas to actually burn while drilling, in which case *de minimis* amounts of gas may still be vented.

The flaring requirements in § 3179.101 of the 2016 Rule fall outside BLM's regulatory authority because these requirements do not prevent waste or avoidable loss, and instead are intended only to protect air quality. As has been stated above, the flaring of gas during drilling does not prevent waste or avoidable loss. It cannot be captured and sold, there is no way to reinject the gas, and flaring results in more waste of gas to operate a pilot on a flare.

Because of the impracticality of many options for gas capture in the context of drilling operations, the requirements of this provision present challenges to operators to engineer, procure, and install the flare systems to be required. As a consequence, suspension of the requirements of this provision is appropriate to ensure that BLM and operators are not faced with implementing a requirement that may not exist under a revision to the 2016 Rule.

8) § 3179.102 – This section of the 2016 Rule requiring that all gas reaching the surface during completion or post completion be captured or sold with no allowance for venting is technically infeasible and should be delayed or suspended

The requirement in this section of the 2016 Rule that all gas that reaches the surface during well completion and post completion, drilling fluid recovery, or fracturing or refracturing must be captured and sold, flared, used onsite, or injected with no allowance for any venting is technically infeasible. Until a two or three phase gas/liquid separator can be operated, the only option is venting as EPA has acknowledged in NSPS Subpart OOOO and proposed OOOOa.

NSPS Subpart OOOOa applies to each well completion with hydraulic fracturing or refracturing for all gas wells and for all oil wells with a GOR greater than 300 scf of gas per barrel of oil produced. Therefore, completions following hydraulic fracturing are already covered by a specific NSPS including requirements for emission controls, monitoring, record keeping and reporting. API has submitted comments to EPA regarding additional issues of technical infeasibility as follows:

- A natural gas gathering line/system must be permitted, installed and operational in the area.
- A contractual right to flow into the gas gathering system must be agreed to with the company that owns the gathering line.
- Necessary permits and right of way must be obtained for the pipeline from the well site to the natural gas gathering system.
- The natural gas must meet the specifications of the natural gas gathering line.
- There must be adequate reservoir pressure to flow into the natural gas gathering line to clean up the well and not choke it.
- The natural gas gathering line must be operational at the time of the completion.
- A gas gathering system with sufficient capacity must be in place.

API requests delay and suspension of the requirements of this section, and agrees with the discussion in the October 5 Notice that this provision may be found duplicative and unnecessary in light of current operating practices and analogous EPA regulations in 40 CFR Part 60, subparts OOOO and OOOOa. Accordingly, a BLM review is necessary and suspension is

appropriate to ensure that operators and BLM are not required to implement a requirement that may be repealed.

To further support BLM's suspension of this section, API notes that this section of the 2016 Rule inappropriately limits the combined flared volumes regulated under this section with the flared volumes in § 3179.103 to 20 MMcf. As API stated in our comments on the 2016 Rule, the 20 MMcf limit is arbitrary and too low for modern day unconventional production testing, let alone the combined volume of those operations. Unconventional wells could reach this limit in only three to four days. Reducing the duration for determining the production of a well could result in inadequate design and sizing of the production equipment and insufficient pipeline capacity resulting in additional flaring and venting from the facility in the future. Data obtained through production testing should not be limited to an arbitrary limit. Production tends to fluctuate heavily in the first few days as the well cleans up.

9) § 3179.201 & § 3179.202 – The section of the 2016 Rule establishing equipment requirements for pneumatic controllers is unnecessary in the light of EPA's NSPS OOOO and OOOOa requirements and should be delayed or suspended

The requirements of §§ 3179.201 and 3179.202 requiring replacement of pneumatic controllers and pneumatic pumps are in direct conflict with § 3178.3 and § 3178.4 that specifically state that royalty is not due for gas used to operate pneumatic controllers and pumps. BLM recognizes the beneficial use of gas to operate these devices in § 3178.4 which should mean the agency does not consider operating these devices to be "avoidable loss" or waste. If losses associated with the proper functioning of these devices are not "waste," then BLM has no basis for requiring their replacement. Section 3178.4 effectively authorizes use of natural gas to drive pneumatic pumps, yet § 3179.202 effectively prohibits this same use by requiring pump replacement with zero emission pumps. Furthermore, routing the pumps to a control device increases waste due to the additional gas required to operate the pilot on the control device. Because these pumps by design vent gas to operate, the loss of gas associated with these pumps is not "avoidable," and therefore cannot be royalty bearing. For the same reason, BLM has no authority to require replacement of these pumps.

This section of the 2016 Rule is unnecessary in light of EPA's NSPS OOOO and OOOOa requirement to not allow installation of high bleed pneumatic controllers or pumps which will ensure over time that as they go out of service all high bleeds will be replaced. Operators will replace equipment where it makes economic sense. Some controllers require the replacement of other pieces equipment such as the entire separator in order to replace the controller making the cost even higher. In some cases replacement of a controller requires shutting in the well or a pipeline which could result in the loss of the well or loss of production of several wells supplying the pipeline. Also because this rule would apply to pre-OOOO sites, operators of many low volume and marginal wells would likely choose to shut in these wells rather than to incur these expenditures, resulting in a loss of production for a negligible benefit.

10) § 3179.203 – The section of the 2016 Rule establishing equipment requirements for storage vessels is unnecessary in the light of EPA's NSPS OOOO and OOOOa requirements and should be delayed or suspended

This section of the 2016 Rule likewise conflicts with BLM's claim that storage vessel emissions are an unavoidable loss in § 3179.4. As noted in API's comments on the 2016 Rule as proposed, storage vessel emissions are clearly in the purview of EPA and state air quality agencies as VOC vapors from the storage vessel are an air pollutant and not a waste of otherwise economically recoverable mineral resources. The combustion control requirement does not recover any additional hydrocarbons and would not increase royalties. Furthermore, a combustion control device increases the waste of gas due to the additional gas required to operate the pilot on the control device. Consequently, API continues to believe that this provision is outside of BLM's authority and should be removed in a revision to the 2016 Rule.

Here again, BLM greatly underestimated the cost impacts especially considering adding controls to an existing storage vessel cost far more than for an new facility and greatly underestimated the number of storage vessels this will impact (a single company alone, for example, reported over 300 storage vessels that would need to comply with this section of the 2016 Rule), as described in API's comments on the 2016 Rule as proposed. To consider just one argument in support of API's request that BLM not include a requirement to control emissions from storage tanks in the 2016 Rule, the ability to use vapor recovery is severely limited or technically infeasible at most production sites on BLM leases. Vapor recovery and vapor combustion each require a large enough volume of gas at a stable rate to be able to operate a vapor recovery device or vapor combustion equipment, as the case may be. Vapor recovery and vapor combustion also typically require electric power to efficiently run small motor driven vapor recovery compressors, or for very large facilities, an engine driven compressor. Many federal and Tribal land well and field sites do not have power. Operating an engine produces more NOx emissions, wastes more natural gas, suffers from reliability problems, and requires significant maintenance and cost. Even if installing electric power systems is economic, BLM has been resistant to approving above ground power lines, and buried cable approximately doubles the cost. Additionally, vapor recovery requires having a low pressure line/collection system to send the gas to. Such systems do not exist on most federal and Tribal lands or additional stages of compression both of which can make it cost prohibitive. Furthermore, this section of the 2016 Rule is unnecessary in light of EPA's NSPS OOOO and OOOOa requirements for construction, reconstruction, or modification of storage vessels. Over time, all the storage vessels will be replaced and the replacement vessels will be subject to NSPS OOOOa.

11) § 3179.204 – The section of the 2016 Rule establishing equipment requirements for downhole well maintenance and liquids unloading should be delayed or suspended

This section of the 2016 Rule conflicts with BLM's claim that emissions from well maintenance and liquids unloading constitute an unavoidable loss in § 3179.4. Section 3179.204 is another proposed requirement that is outside of BLM's authority, and API has recommended that BLM should withdraw its prescriptive requirements for liquids unloading, in particular the prohibition of purging for new wells and flaring for all wells. Even EPA has acknowledged lack of sufficient technical information to regulate liquids unloading, which BLM recognizes in the preamble of the 2016 Rule and 2016 RIA. API is not aware of any instance in which flares are used for liquids unloading for sweet gas wells as the use of a flare adds back pressure to the well, achieves little, if any, benefit, and is generally cost prohibitive. Such flaring cannot be considered a standard industry practice. Given the number of concerns with the ability of BLM to implement the requirements of this provision of the 2016 Rule, which in any event is an air

quality measure outside BLM's authority under the MLA, the requirements of this section of the 2016 Rule should be suspended or delayed. Also, the multiple Sundry Notices required by this section add cost and burden to both industry and the BLM with no waste minimization benefit. This section is also duplicative of many state and local regulations around liquids unloading.

12) § 3179.301-305 – The section of the 2016 Rule establishing requirements for equipment leaks is outside BLM's authority under the MLA and should be delayed or suspended pending further review

As API stated in our comments on the 2016 Rule as proposed, LDAR is clearly outside of BLM's authority under the MLA. In most cases, operators will incur a net cost in implementing a BLM LDAR program since the value of gas saved from a leak repair will be less than the costs incurred for scheduled surveys, repair, re-survey, and documentation. When cost is greater than the value of gas saved by a leak repair, there is no net gas capture benefit, and the loss is therefore "unavoidable" under prudent operator standards.

In the 2016 RIA, BLM relied on the EPA assumptions to estimate the costs of the proposed semi-annual optical gas imaging (OGI) LDAR monitoring requirements. As detailed in API's comments on the 2016 RIA submitted with our comments on the 2016 Rule as proposed, BLM omitted or underestimated key elements of an LDAR program, such as understated OGI monitoring costs, start-up costs, and monitoring plan development. BLM also underestimated the costs from travel associated with the LDAR leak screening and repair activities. Correcting many of these issues, API revised the cost estimate to reflect a more accurate cost impact from the 2016 Rule as proposed, and provided this information in a report accompanying its comments to BLM which accompany this letter. This revised cost estimate accounts for some of the excluded and underestimated costs, but conservatively uses the Carbon Limits Study (2013) as the basis. The revised cost estimated by API assumes that companies outsource the OGI semi-annual leak monitoring to third party contractors, and conservatively assumes that several of the cost elements are captured in BLM's administrative burden cost estimate. The revised cost estimate is $2,607 per well site per year, amortized at a 7% discount rate. This API revised estimate is nearly 40% higher than BLM's estimate of $1,879. These sections mainly affect pre-OOOOa, existing facilities which are very low volume producers. These low volume/pressure wells that would be subject to the requirements of this section of the 2016 Rule are a very low risk of gas emissions.

In addition to underestimating costs, BLM also overestimated the benefits from the proposed LDAR provisions. The benefits that BLM estimated include both the natural gas recovery benefits to operators and the social cost of methane to society. BLM overstated the methane emission reductions associated with the provision in the 2016 Rule addressing equipment leaks and LDAR. Like EPA, BLM overestimated the component counts by over 30% by rounding up estimates. The methane composition for oil wells was also overestimated. These issues result in an overstatement of the benefits based on the volume of recovered natural gas. Collectively, correcting these issues with BLM's cost and benefit estimates for LDAR result in negative net benefits across all years, as API detailed in its comments on the 2016 RIA. This means that costs are significantly higher than benefits for the proposed LDAR provisions, with estimated net benefits of -$33 and -$64 million at 3 and 7% discount rates, respectively, in year 2019 when the rule is fully implemented.

As is likewise the case with other sections of the 2016 Rule described above that are intended to limit methane emissions rather than to reduce waste, these LDAR requirements are legally infirm because BLM has exceeded its authority and has intruded on the authority of EPA and the states to regulate air quality under the Clean Air Act. For these reasons, a BLM review is necessary and delay and suspension are appropriate to ensure that operators and BLM are not required to implement requirements that may be repealed.

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To summarize, as has been discussed above, BLM has the authority to delay or suspend provisions of the 2016 Rule, and BLM may take this action pursuant to notice-and-comment rulemaking procedures under the APA and principles of administrative law. Because the 2016 Rule promulgates an air emissions control regime that is beyond the BLM's authority under the MLA, impermissibly alters longstanding principles defining the concepts of waste and avoidable loss, and is based on a fundamentally flawed evaluation of the 2016 Rule's costs and benefits, BLM's proposed delay and suspension of the rule is appropriate so that the agency can determine whether revisions are necessary, as well as to avoid imposing compliance costs on both industry and BLM during that review for requirements that may be substantially revised or eliminated.

Should you have any questions, please contact Richard Ranger at 202.682.8057, or via e-mail at rangerr@api.org.

Very truly yours,

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Upstream and Industry Operations
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cc: Mr. Timothy D. Spisak

Att: API letter of April 22, 2016, re: Bureau of Land Management's "Waste Prevention, Production Subject to Royalties, and Resource Conservation" Proposed Rule at 81 FR 6616 (February 8, 2016), submitted to the Federal eRulemaking portal with reference to Docket ID Number 1004-AE14