

TO: IPAA Board of Directors

RE: 2017 Midyear Meeting Regulatory Update

DATE: June 22, 2017

President Donald Trump began his Administration by issuing numerous Executive Orders and Memoranda that dramatically altered the federal approach to many issues of importance to oil and natural gas producers. These changes in turn prompted revisions in litigation in which IPAA is involved. The Administration requested individual agencies to establish Regulatory Reform Task Forces, seek public comment, and report back to the White House. Some agencies already have sought public input to identify existing regulations, paperwork requirements, and other regulatory obligations that can be modified or repealed, consistent with law, to achieve meaningful burden reduction. IPAA responded to the request from the Environmental Protection Agency (EPA) in mid-May and plans to submit comments to the Department of Energy (DOE) in mid-July.

While the Trump Administration moved quickly in some areas, it has been slow to submit nominations for senior positions within the agencies. This is slowing down the ability of agencies to move forward on initiatives. The following provides an update on the significant regulatory initiatives in which IPAA will continue to play an active role.

1. BLM Obama Administration Hydraulic Fracturing Rule

On March 21, 2015, the U.S. Department of the Interior (DOI) Bureau of Land Management (BLM) under the Obama Administration finalized its rule regulating hydraulic fracturing activities on federal lands. The precedent-setting rule requires pre-approval of hydraulic fracturing operations, regulations on well integrity, disclosure of chemicals used, and storage of recovered fluids.

DOI has never made a compelling case that this rule is necessary or identified a state that has insufficient regulations in place to properly regulate hydraulic fracturing activities on federal lands in their states. As such, IPAA, along with Western Energy Alliance (WEA) and the states of Colorado, Wyoming, North Dakota, and Utah, and the Ute Indian Tribe challenged the rule in the federal district court of Wyoming, characterizing the federal government's rulemaking as duplicative of states' efforts and unsubstantiated. On June 23, 2015, U.S. District Court Judge Skavdahl heard IPAA's motion for a Preliminary Injunction (PI) and agreed that a temporary stay would be in place until the Administrative Record was closed and all documents could be reviewed. Less than two weeks after the close of the Administrative Record, Judge Skavdahl granted a permanent stay of the rule until a decision on the merits of the case had been reached.

On June 21, 2016, IPAA was extremely pleased that Judge Skavdahl struck down the BLM's final rule. Judge Skavdahl agreed with IPAA that BLM does not have the congressional authority to regulate hydraulic fracturing on federal lands. This is a big and hard-fought win for independent producers!

As expected, an appeal was filed to the Tenth Circuit Court. Opening briefs were submitted by all parties, and the case was being prepared for a March 2017 hearing when the Tenth Circuit signaled their intent to better understand the position of the new Trump Administration on the rule before proceeding to a hearing. DOI

Secretary Zinke and the Trump Administration filed briefs with the court stating that they did not share the position of the previous Administration and plan to open a new notice and comment rulemaking.

At printing, the Trump Administration has yet to issue a new rulemaking, but IPAA believes it to be imminent.

2. Venting and Flaring

In 2014, BLM shifted its focus to the venting and flaring of natural gas on federal lands. In the first half of 2014, BLM held four listening sessions on its proposal. Then, on February 8, 2016, BLM issued its proposed rule on Waste Prevention, Production Subject to Royalties, and Resource Conservation Rule.

IPAA worked with a number of trade associations to submit detailed comments on both the technical aspects of the rule as well as overarching concerns. In addition to a general concern related to the authority of BLM to directly regulate air emissions, BLM's efforts, if implemented, will have the effect of further exacerbating the decline of production on federal lands because wells will be shut in. On October 6, 2016, IPAA and member companies met with officials who are reviewing the final cost analysis of the rule at the Office of Management and Budget (OMB). Again, IPAA companies stressed our concerns with the rule, particularly that it violates the Minerals Leasing Act, includes unworkable variance provisions, and fails to consider operational conditions that result in unavoidable loss, and that the costs of the rule outweigh the benefits. The final rule was released just prior to the Obama Administration leaving office, with compliance deadlines for various parts of the rule taking place as early as April 2017 and full compliance set for January 2018. IPAA and WEA retained Davis, Graham, and Stubbs' legal services and immediately filed a challenge to the rule in the U.S. District Court of Wyoming.

IPAA was hopeful that a Congressional Review Act (CRA) would be passed through Congress to reverse the venting and flaring rule, but the last-minute attempt to get the bill through the Senate was unsuccessful. In the meantime, the IPAA/WEA request for a PI was not granted, as Judge Skavdahl stated that our suit could not meet the high bar to prove immediate and irreversible harm. On June 14, 2017, the Trump Administration published a Section 705 notice in the *Federal Register* which will suspend any future compliance deadlines for the venting and flaring rule while the Administration works through the process of issuing a new notice and comment rulemaking. Though we do expect this action to be challenged by the environmental community, this is great news for industry! Congruently to this notification, IPAA and WEA will continue with the lawsuit against the original rule to ensure no stone is left unturned. Though there are many moving parts, at the time of printing, the case in the District Court of Wyoming is set to be fully briefed by July 3rd.

3. Wildlife

a. Migratory Birds

On May 26, 2015, the Fish and Wildlife Service (FWS) published a Notice of Intent (NOI) to prepare a programmatic environmental impact statement (EIS) to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the 1918 Migratory Bird Treaty Act (MBTA). The notice specifically identified methane or other natural gas burner pipes at production sites and elsewhere, and open oil, gas, and wastewater disposal pits as problems, along with communication towers and power transmission and distribution lines. While very early in the rulemaking process, IPAA has concerns over the authority and direction of this NOI and submitted detailed joint comments with the American Petroleum Institute (API) on July 27, 2015, that expressed these concerns.

On January 10, 2017, the Obama Administration issued a solicitor's opinion arguing incidental take is prohibited under the MBTA. On February 6, the Trump Administration suspended and temporarily withdrew this opinion. IPAA continues to work with a broad coalition of stakeholders on a legislative solution to codify that normally lawful permitted activities are not criminally liable for incidental take under the MBTA. IPAA is working on both legislative and regulatory solutions to codify that oil and gas activities are not criminally liable for incidental take under MBTA.

b. Critical Habitat

On June 26, 2014, the FWS and the National Marine Fisheries Service (NMFS) (together, the Services) proposed three significant changes to their regulations and policies regarding critical habitat under the Endangered Species Act (ESA). IPAA submitted comments on October 9, 2014. While the final rules were scheduled to come out in June, all are now at OMB for final review. Following is a summary of each proposal:

- The first proposal would change the regulations to give FWS, among other things, vast new authority to designate areas as critical habitat that are not currently (and have never been) occupied by a listed species. FWS seeks this authority to deal with the changes in habitat that it anticipates will result from climate change.
- The second proposal would change the definition of "destruction or adverse modification." Persons performing activities pursuant to a federal permit must assure that their activities will not be likely to result in the "destruction or adverse modification" of critical habitat. The proposed changes seek to clarify how "adverse modification" is to be determined. Unfortunately, the proposed changes fail to clarify the matter and, in fact, could result in a significant expansion of the habitat features that must be protected from "adverse modification."
- The third proposal is a draft policy that purports to clarify how FWS will exercise its authority under section 4(b) (2) of the ESA to exclude certain areas from designation even though the areas may qualify for such designation. The ESA states that such exclusion is appropriate when the benefits of excluding an area outweigh the benefits of including the area. Unfortunately, the draft policy imposes a *de facto* moratorium on the exclusion of areas on federal lands, which is where the most significant conflicts over habitat use are likely to occur.

The final rules and the final policy were issued on February 11, 2016, and presented very little change from the draft versions described above. The final rules went into effect in March 2016. On November 29, 2016, 18 states filed a challenge in the Southern District of Alabama. The states argue the revised definitions are inconsistent with the ESA, as the new rules expand the Services' authority.

c. Mitigation

On November 3, 2015, President Obama issued a Presidential Memorandum on Mitigating the Impacts on Natural Resources from Development and Encouraging Related Private Investment. The Memorandum directed the Departments of Defense, Interior, and Agriculture, the National Oceanic and Atmospheric Administration, and EPA to establish a "net benefit goal, or at minimum, a no net loss goal for natural resources the agency manages that are important, scarce, or sensitive." Specifically, the memo directed that "agencies shall adopt a clear and consistent approach for avoidance and minimization of, and compensatory mitigation for, the impacts on their activities and the projects they approve."

On March 28, President Trump signed an Executive Order that revokes the Obama Memorandum on Mitigating Impacts. On March 29, Interior Secretary Zinke signed Secretarial Order #3349 that requires the reexamination of the mitigation and climate change policies and guidance across DOI as well as rescinded former DOI Secretary Jewell's Secretarial Order #3330. IPAA is now working to rescind and replace the FWS Mitigation

Policy published November 21, 2016 and the Endangered Species Act Compensatory Mitigation Policy, published December 27, 2016, as well as others.

d. Non-federal Oil and Gas Rights

i. National Park Service (NPS) Non-Federal Oil and Gas Rights

On October 26, 2015, the NPS issued a proposed rule entitled "General Provisions and Non-Federal Oil and Gas Rights." The notice identifies some 534 non-federal oil and gas operations across 12 units of the NPS. Highlighting that present 9B regulations are effective at equipping the NPS to carry out its responsibilities clearly, in addition to the well-established principle of common law, these changes are duplicative, burdensome, and unnecessary. IPAA submitted comments outlining these concerns with API, WEA, and the American Exploration and Production Council (AXPC). On November 3, 2016, the NPS issued the final regulations. The Record of Decision and the Final Rule became effective December 5, 2016. Rep. Paul Gosar introduced a CRA resolution of disapproval against this regulation, though neither chamber has acted on it to date. On March 28, Interior Secretary Zinke signed a Secretarial Order that required review of the final rule and a report to the Assistant Secretary as to whether the rule is fully consistent with the policy set forth in the Trump Administration's Energy Executive Order.

ii. Non-Federal Oil and Gas Development within the National Wildlife Refuge System (NWRS)

On February 24, 2014, FWS issued an advance notice of proposed rulemaking (ANPRM) to impose regulations that would provide an uncertain and inconsistent regulatory environment for oil and gas operations on refuges. IPAA's main objections were that the these regulations were unnecessary, have not been justified by FWS, are constrained by the bounds of FWS' legal authority, and will only result in duplicative layers of regulatory oversight. IPAA and API sent a letter to FWS on April 25, 2014 highlighting concerns with these new regulations. On October 5, 2016, IPAA and API sent a letter to OMB's Office of Information and Regulatory Affairs (OIRA) asking the office to not endorse either the NPS or NWRS rules. On November 10, 2016, the FWS finalized this rule, and it became effective on December 14, 2016. Rep. Kevin Cramer introduced a CRA resolution of disapproval against this regulation, though neither chamber has acted on it to date. On March 28, Secretary Zinke signed a Secretarial Order that required review of the final rule and a report to the Assistant Secretary as to whether the rule is fully consistent with the policy set forth in the Trump Administration's Energy Executive Order.

e. BLM Planning 2.0

In 2014 BLM began an initiative known as "Planning 2.0" to update its resource management planning process. In introducing a draft regulation, BLM stated that Planning 2.0 is intended to increase opportunities for public involvement, to account for landscape-level management rather than the traditional, targeted approach on a field office level, and to respond to "environmental, economic, and social changes" on an ongoing basis. IPAA believed the Proposed Planning Rule shows a bias against oil and gas interests. IPAA submitted comments to the draft proposal and submitted a statement for the record to a Senate Energy and Natural Resources Committee hearing on June 21, 2016. On March 27, President Trump signed into law a CRA resolution nullifying the BLM's 2.0 rule, which was one of IPAA's first great legislative victories of the 115th Congress.

4. BLM Obama Administration revision of Onshore Orders Nos. 3, 4, 5

In 2013, the BLM initiated efforts to modify Onshore Orders 3, 4, and 5 which address site security, measurement of oil, and measurement of natural gas. On July 13, 2015, the BLM issued a proposed rule for federal onshore oil and gas operations for site security, which will replace the existing Onshore Order No. 3.

IPAA worked with WEA to develop comments that touch on a number of different issues, including the treatment of communized agreements to state and fee tracts in federal units, the need for new rules to apply only to new facilities, and royalty measurement points.

On September 30, 2015, the BLM issued a rule to update existing regulations that relate to measurement standards for oil produced on federal lands. This rule will replace Onshore Order No. 4. On October 13, 2015, the BLM issued a rule to revise and replace Onshore Order No. 5 dealing with the measurement of gas. IPAA worked with API and other trade associations to submit comments for Orders Nos. 4 and 5. Our comments focused heavily on BLM's reluctance to adopt properly-established industry standards, setting prescriptive standards that will not accommodate future technologies, and BLM's failure to provide rationale for selecting many of the technologies, methodologies, and standards prescribed in the Proposed Rule. Furthermore, we noted BLM's gross underestimate of cost. The agency has chosen to look at these three interrelated rules as separate entities and is not taking into consideration the cost of the rules when combined.

On October 17, 2016, BLM issued their final Rules for Onshore Orders Nos. 3, 4, and 5 and issued an implementation date for operators. However, the computer program necessary to submit information for Onshore Orders 3 and 4 has yet to be implemented. Thus, operators are still in limbo between a final rule and compliance. Meanwhile, there were several attempts on Capitol Hill for CRA legislation that would render the rules null and void. Although a vote on this CRA was never taken, it helped to gain the attention of the Trump Administration. These rules are on the list of items within the new Administration for regulatory review.

5. Office of Natural Resources Revenue (ONRR) Rulemakings

Under the Obama Administration, the Office of Natural Resources Revenue (ONRR) within DOI issued rulemakings relating to an overhaul of ONRR's civil penalty regulations as well as royalty valuation. Although ONRR claims the changes are intended to clarify the current regulations, the proposal makes significant revisions to the regulations. IPAA submitted substantial comments for each. In response to industry lawsuits challenging the final rules, the Trump Administration, through the Department of Justice, issued a stay on the final rules and subsequently opened up a comment period to examine how the rules could be altered and fixed. IPAA submitted comments to the first round and will submit comments in each stage of the process.

6. Silica Exposure Issue

In March 2016, the Occupational Safety and Health Administration (OSHA) issued a final rule limiting worker exposure to respirable crystalline silica. The rule is comprised of two standards, one for Construction and one for General Industry and Maritime.

The key provisions of the rule are:

- Reduces the permissible exposure limit (PEL) to 50 micrograms per cubic meter of air, averaged over an 8-hour shift.
- Requires employers to:
 - o Use engineering controls to limit worker exposure to the PEL.
 - Provide respirators when engineering controls cannot adequately limit worker access to highexposure areas.

- o Develop a written exposure control plan.
- o Train workers on silica risks and how to limit exposures.
- Provides medical exams to monitor highly exposed workers.
- Provides flexibility to help employers, especially small businesses, protect workers from silica exposure.

The rule will be phased in for the affected industries based on the following schedule:

Construction – June 23, 2017 (one year after the effective date).

General Industry and Maritime – June 23, 2018 (two years after the effective date).

Hydraulic Fracturing – June 23, 2018, two years after the effective date for all provisions except Engineering Controls which will have a compliance date of June 23, 2021 (five years after the effective date).

7. Process Safety Management

OSHA is in the process of updating the Process Safety Management (PSM) standard with the intention of including the upstream oil and natural gas industries. OSHA has started industry outreach to seek comments from small businesses. The potential changes would have dramatic effects on the oil and gas industry, effectively removing the exemption for atmospheric storage tanks and adding drilling/well servicing to PSM applicability. The potential economic impacts to the industry have not yet been estimated but, if enacted, have the potential to be significant.

The potential changes in the scope of the standard include:

- Clarifying the exemption for atmospheric storage tanks
- Expanding the scope to include Oil- and Gas-Well Drilling and Servicing
- Resuming Enforcement for Oil and Gas Production Facilities
- Expanding PSM coverage and requirements for reactivity hazards
- Updating and expanding the list of highly hazardous chemicals (HHCs) in Appendix A of the existing PSM standard
- Amending Paragraph (k) of the Explosives and Blasting Standard to cover dismantling and disposal of explosives and pyrotechnics under the requirements of PSM.

Interviews with small business entities concluded in August 2016, and formal comments were provided. IPAA and AXPC filed joint comments for the record as well.

The following documents on the OSHA website provide more extensive information:

PSM SBREFA Issues Document
PSM SBREFA Small Entity Representative Background Document
PSM SBREFA Panel Powerpoint
PSM Docket

8. Crude Oil Transport

Following derailments of trains hauling crude oil, the Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) began to move forward with a long-stalled regulatory proposal that would require increased safety measures on tanker cars hauling crude oil. In an effort to maintain

continuity of the rule through international jurisdictions, DOT worked closely with the Canadian government to develop the final rule, which was released on May 1, 2015.

PHMSA issued an ANPRM at the end of the Obama Administration to address a petition by the New York State Attorney General to require all crude oil transported by rail to have a Reid vapor pressure (RVP) of less than 9.0 pounds per square inch (psi). PHMSA expanded upon the petition to seek comment on the expected impacts of establishing a nationwide RVP standard and whether that standard should apply to all modes of transportation. IPAA submitted comments in May, arguing that PHMSA's ANPRM is premature in light of ongoing studies and the directive from OMB, "Promoting Energy Independence and Economic Growth." In the comments, IPAA again urged PHMSA to review its Sampling and Testing program applied to crude transported by truck, contending that it does not meet the OMB directive

As part of the rail rule, PHMSA changed its Sampling and Testing requirements applicable to crude oil transported by rail and by truck. Given that the rulemaking was titled to address rail transport, producers relying on truck transport did not have opportunity to provide input.

9. Information Collection

DOE's Energy Information Administration (EIA) proposed in April to expand data reporting on Form 914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report." EIA is seeking to further refine data now reported as "Other States," to separate reporting for Alabama, federal offshore Pacific, Michigan, Mississippi, and Virginia. In meeting with EIA staff, IPAA raised concerns with proposed collection of state-level volumes of crude oil and lease condensate going into stabilizer units. IPAA explained to EIA staff that the use of stabilizers is a commercial decision and not one required for the safe transport of crude oil. IPAA will file comments jointly with API and the Natural Gas Supply Association on June 30.

10. Clean Water Act

a. Navigable Waters (Waters of the United States) Definition

In May 2015, EPA and the U.S. Army Corps of Engineers (the Corps) released a final rulemaking to identify waters protected by the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act or CWA) – defining "waters of the United States" (WOTUS) – and to implement the Supreme Court's decisions concerning the extent of waters covered by the CWA.

Congress authorized the agencies to regulate discharges of pollutants into "navigable waters," which are defined in the CWA as "waters of the United States". The determination of what constitutes a water of the United States governs the scope of the agencies' authority under a variety of CWA programs, including the Spill Prevention, Control, and Countermeasure (SPCC) Program, the National Pollutant Discharge Elimination System (NPDES), and the Section 404 dredge-and-fill programs. IPAA opposed the final WOTUS rulemaking. IPAA has worked with other affected industries – through the Waters Advocacy Coalition – to advocate for a more workable regulation that is consistent with the congressionally adopted scope of the CWA.

Since the WOTUS rule was released, numerous lawsuits have been filed challenging its validity. The new requirements were suspended while the lawsuits were considered. In February 2017, the Trump Administration issued an Executive Order to review, rescind or revise the WOTUS rule. It further ordered that agencies should rely on a narrower interpretation of navigable waters (Scalia) rather than a broader one (Kennedy). The Administration is now proceeding to move on these directives; however, the actions will be heavily contested by environmental groups and allied states.

b. Nationwide Permits

Within the impact of a broader scope of WOTUS on the Section 404 dredge-and-fill program is its impact on the Nationwide Permits (NWPs) program. NWPs are used to simplify numerous small projects with limited environmental impacts. NWPs are general permits that do not require the extensive procedures of a full-blown Section 404 review. NWPs are issued for a five-year period and had to be renewed in March 2017. The Corps of Engineers proposed reissuance of NWPs essentially as they have been in the past.

However, NWPs became another target of the Keep-It-in-the-Ground movement. Environmental groups targeted several of the NWPs and challenged the Corps proposal. For example, NWPs cover utility crossing of streams and include oil and natural gas pipelines. This NWP was a specific environmentalist target to try to dramatically limit its applicability. A successful effort would make not only pipelines but portions of production operations that have previously fallen under the NWP process exposed to the full Section 404 permitting process.

In January 2017, the Corps finalized NWPs for another five years without accepting the environmentalist proposal. IPAA worked with a broad cross section of industry and other allies to emphasize the importance of a well-written NWP to allow critical national infrastructure development.

c. Effluent Limitation Guidelines

i. Unconventional Oil and Gas Pretreatment Effluent Limitation Guideline

In the spring of 2015, EPA proposed an Unconventional Oil and Gas (UOG) Pretreatment Effluent Limitation Guideline (ELG) for wastewater going to Publicly Owned Treatment Works (POTW). In June 2016, EPA promulgated a rigid ELG pretreatment standard – zero discharge. This action is a failure of EPA's responsibilities. Once it stepped into the ELG process, a final ELG prevents the use of Best Professional Judgment (BPJ), a flexible permitting process. Consequently, EPA should have developed an actual technology-based ELG. Instead, EPA chose a zero discharge standard based on the direct discharge ELG for oil and gas production. This is a flawed analysis. The direct discharge ELG is based on circumstances in the mid-1970s where EPA concluded that the presence of the Safe Drinking Water Act (SDWA) Underground Injection Control (UIC) program provided an acceptable produced water management option. However, the very trigger that EPA justified in arguing for a UOG Pretreatment ELG was the use of POTWs in an area where UIC was not available. Consequently, it is inappropriate for EPA to create a zero discharge ELG; it should develop appropriate Best Available Technology Economically Achievable (BATEA) standards for a UOG Pretreatment ELG. Additionally, in its definition of UOG, EPA captures formations that have long been considered as conventional formations, thereby restricting their treatment options.

IPAA, working with its member companies, submitted comments on the proposed UOG ELG reflecting independent producer concerns and the need for options. IPAA continues to advocate the need for wastewater disposal options and will continue to educate EPA on the processes involved with oil and natural gas exploration and production (E&P) to better inform EPA's rulemaking efforts. IPAA has identified this ELG as a regulation requiring action under the Administration's regulatory reform efforts.

ii. Centralized Waste Treatment Study

EPA initiated a study of centralized waste treatment (CWT) facilities that accept oil and gas extraction wastewater, to examine whether current regulations provide adequate controls for treating wastewater. EPA indicated the study will target offsite CWT facilities. The CWT study is looking at all CWTs accepting oil and natural gas wastes – both from conventional and unconventional operations. Limitations on the ability to use CWT facilities will further reduce opportunities to dispose of wastewater. IPAA and its member companies have met with EPA staff undertaking the CWT study to inform EPA on the need for disposal options as well as

the role of CWTs in oil and natural gas E&P activities. EPA has developed a list of about a dozen CWTs across the nation and has more thoroughly assessed nine. The study could lead to a regulatory proposal, but none is imminent.

iii. Additional Effluent Limitation Guideline Issues

EPA regulatory planning documents indicate that it may evaluate other aspects of the oil and gas extraction ELG. This could include the beneficial use exemption west of the 98th meridian. However, these aspects are in the early planning stages, and nothing is currently active.

11. Clean Air Act (CAA)

a. New Source Performance Standards - Subpart OOOO

In August 2012, EPA finalized CAA New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Oil and Natural Gas Sector. EPA conducted reconsideration rulemakings in 2013 and 2014 that revised certain aspects of the 2012 rule. IPAA and a coalition of state oil and natural gas associations challenged the final NSPS and NESHAP rulemakings and subsequent reconsideration rulemakings in court and petitioned for reconsideration of the 2012 rule. Litigation on the NSPS and NESHAP has been held in abeyance pending resolution of the ongoing reconsideration issues.

On June 3, 2016, EPA published in the *Federal Register* 40 CFR Part 60, Subpart OOOOa, which built on the 2012 NSPS and regulated methane for the first time from the same sources and added additional sources for control. This rulemaking also addressed certain issues that were raised on reconsideration during the 2012 rule, although EPA indicated that not all issues have been resolved and will be addressed through subsequent reconsideration rulemaking. Additionally, EPA expanded Subpart OOOO to specifically apply to methane emissions.

In March 2017, the Trump Administration issued an Executive Order requiring EPA to review the June 3, 2016, regulations and determine whether to revise them. In meetings with EPA and in comments submitted to the Agency, IPAA has urged it to revise these regulations with regard to their focus on methane and to correct other elements.

Additionally, throughout 2015, EPA began enforcement actions, many of which are related to compliance with requirements on storage vessel facilities under Subpart OOOO. North Dakota operations have been a particular target, expanding into more complicated questions of state versus federal responsibilities. In addition, at a February 2016 IPAA meeting, EPA's Enforcement attorneys raised questions regarding whether its interpretation of the storage vessel affected facility definition differs from interpretations by the EPA regulatory development office. At a May 2016 IPAA meeting, EPA's Enforcement attorneys discussed the issue more extensively. However, the discussion failed to clarify the issue. IPAA will continue to monitor EPA's actions and has urged the Trump Administration to alter EPA's abusive enforcement tactics.

b. Methane Emissions

In March 2014, President Obama issued the Climate Action Plan Strategy to Reduce Methane Emissions (CAP). President Obama made climate change a legacy issue for his Administration, including reducing methane emissions. In January 2015, the Obama Administration announced plans to regulate methane emissions in the oil and natural gas E&P sector. EPA was petitioned by environmental groups to promulgate regulations on oil and natural gas production targeting methane under CAA Section 111 and to regulate air toxics under CAA section 112. In September 2015, EPA proposed a package of volatile organic compound (VOC) and methane regulations that included: (1) CAA regulatory program for new sources; (2) issuance of

CTGs for ozone non-attainment areas; (3) a new aggregation proposal; and (4) a revised voluntary program. Additionally, BLM proposed venting and flaring rules for operations – new and existing – on federal lands. In March 2016, the Obama Administration announced additional initiatives to regulate existing oil and natural gas facilities nationally.

i. Regulation of Methane from New Sources -- Subpart OOOOa

The Obama Administration CAP directed EPA to develop regulations of new sources of E&P emissions. With regard to E&P operations, EPA's NSPS addressed VOC and methane emissions for associated gas from hydraulically fractured oil wells, pneumatic pumps, and a leak detection and repair (LDAR) program. IPAA coordinated with other trade associations in developing a response to the proposal, which was submitted in December 2015.

In June 2016, EPA published its final regulations under Subpart OOOOa. New oil and natural gas production regulations principally covered emissions from completions of hydraulically fractured oil wells, pneumatic pumps, and a fugitive emissions program (including LDAR requirements) for new and modified hydraulically fractured wells. A particularly onerous element of the fugitive emissions program was its expanded application to low-producing wells.

IPAA organized a coalition with other national, regional, and state trade associations to challenge these regulations. Additionally, other oil and natural gas trade associations and 14 states have challenged the regulations in the case captioned *North Dakota v. EPA*. Separately, the IPAA coalition petitioned EPA for reconsideration on a number of specific sections of the regulations.

In May 2017, the case was put in abeyance at the request of the Trump Administration – consistent with its intent to review the regulations under the Executive Order instruction. Subsequently, EPA acted to stay the pending implementation of the fugitive emissions program and other elements of the regulations while it reconsidered them. Environmental groups are challenging the stay. IPAA and the other litigants filed to intervene in support of EPA's actions. Additionally, EPA has proposed a two-year stay of key parts of the regulations including the fugitive emissions component; comments are due in mid-July. As EPA moves forward with its regulatory reconsideration of the Subpart OOOOa (and some of Subpart OOOO), environmental activists will aggressively attempt to use the courts to prevent EPA's actions.

ii. Regulation of Methane from Existing Sources

While environmentalists petitioned EPA to undertake a novel interpretation of the CAA to satisfy their concerns – use of Section 111(d) of the CAA – that would target existing operations, EPA initially chose to propose CTGs for E&P operations in ozone nonattainment areas. CTGs are used to develop Reasonably Available Control Measures (RACM) in these areas and would be required under State Implementation Plans (SIPs). EPA's CTG proposal includes requirements paralleling those in Subparts OOOO and OOOOa for pneumatic controllers, pneumatic pumps, compressors, storage tanks, and an LDAR program. IPAA submitted comments on the CTGs in December 2015. EPA finalized these CTGs in October 2016. EPA completed this action despite its subsequent decision to develop a nationwide existing source emissions control program under CAA Section 111(d). IPAA has requested EPA to suspend or rescind the CTG until it determines what NSPS regulations will be adopted and, if it chooses to adopt specific regulations, make any future existing source determinations based on existing source RACM, not assuming that the NSPS technology is applicable.

In May 2016, EPA announced its initial action regarding the nationwide existing source regulation program – the development of an Information Collection Request (ICR). An ICR is a specific process to solicit detailed information on operations, costs, emissions, and emissions controls at facilities. This information then becomes the basis for the regulation development. The ICR could have been an opportunity for EPA to develop an understanding of the industry. However, the Administration chose to develop an ICR that is excessively

burdensome, not directed at the issues used to justify it, and not producing a meaningful result. Comments on the initial ICR proposals were submitted on August 2, 2016.

Following the 2016 election, IPAA urged the incoming Trump Administration to suspend or cancel the ICR until it determined whether it would embrace the Obama regulations. In March 2017, EPA cancelled the Obama ICR in response to a request from numerous state attorneys general.

iii. Air Aggregation - Source Determination

Title V of the CAA requires every "major source" of air pollution to obtain a Title V operating permit. Under Title V, EPA defines a major source to include "any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year of any pollutant." To determine a single source, EPA relies on three criteria but ultimately makes determinations on a case-by-case basis.

For multiple facilities to be consolidated for purposes of being defined as a "major source," EPA looks at whether they: (1) are under common control; (2) are located on one or more contiguous or adjacent properties; and (3) belong to the same major industrial grouping. Criteria two – the issue of adjacency – has experienced much tumult. Over many years, EPA changed its interpretation of adjacency and faced court opposition when it tried to create an adjacency determination based on interrelationships between operations rather than geographical proximity.

As a part of the EPA methane emissions regulatory package, the agency proposed a "source determination" rule that would apply to oil and natural gas E&P facilities. The proposal directly affected permitting under the Prevention of Significant Deterioration (PSD) and ozone nonattainment programs and in determining whether a facility is a major or minor source under the Title V permitting requirements. EPA sought comments on both a proximity-based test for adjacency (1/4 mile) and a functionality-based approach where facilities are proximate and linked to a common interrelated operation. IPAA submitted comments as a part of its overall response to the methane regulatory package supporting a proximity-based approach. In May 2016, EPA announced its final source determination rule, choosing a proximity-based test that included both adjacency (1/4 mile) and requirements for common control of the facility and equipment common to adjacent facilities. It rejected the functionality-based approach.

iv. Voluntary Program - The Methane Challenge

In addition to the Obama Administration regulatory proposals, EPA sought comments on a voluntary program — the Methane Challenge. This program builds off EPA's previous Gas STAR program but is directed toward existing source methane emissions. Currently, it includes two different approaches. One involves companies agreeing to implement specific Best Management Practices (BMPs); the other would utilize a percentage reduction target. IPAA recommended a number of approaches that might draw independent producer participation. However, ultimately, the Obama Administration's structure for the Methane Challenge provided little incentive for production operations to participate. While a number of local distribution companies have signed up, only one producer has signed up for the percentage reduction option. Given the Trump Administration's very different regulatory views, the future of this effort is uncertain.

c. National Ambient Air Quality Standards

On October 1, 2015, EPA announced a revision to the Ozone National Ambient Air Quality Standard (NAAQS), reducing it to 70 parts per billion (ppb) from the prior level of 75 ppb. Ozone is addressed by regulating VOCs and nitrogen oxides. Because regulation of VOCs is a part of ozone nonattainment requirements, action on ozone will have an impact on oil and natural gas production operations. IPAA joined with other national business trade associations to advocate against lowering the Ozone NAAQS. Additionally,

IPAA submitted comments in response to EPA's proposed rulemaking lowering the Ozone NAAQS. Further, IPAA testified at EPA's public hearings regarding the proposed rulemaking.

IPAA joined with other trades in litigation on the Ozone NAAQS. The Trump Administration sought and the court agreed to postpone litigation on the revised Ozone NAAQS in April 2017. While there are indications that the Trump Administration may reconsider the revised NAAQS, the pathway to that action will be difficult.

If the 70 ppb Ozone NAAQS is not changed, over the next few years, states will need to determine which areas fail to meet the new standard. States will then revise SIPs for their nonattainment areas as well as other areas that are part of the Ozone Transport Region (OTR) which includes Pennsylvania and New York. Once final nonattainment designations are made, states will develop SIPs that will include the RACM that result from EPA's proposal. The Trump Administration also announced a delay in the schedule for revision of SIPs reflecting its concern about compelling states to act when the Administration may seek to alter the NAAQS.

IPAA will continue to be engaged on the ozone issue with regard to the new NAAQS and subsequent regulatory actions.

d. Regulation of Hazardous Air Pollutants

A large coalition of 64 local, state, and national groups filed a petition in May 2014 urging EPA to protect public health by setting pollution limits on oil and gas wells and associated equipment in population centers around the United States. The petition argues that EPA should issue rules that would require oil and natural gas companies to limit hazardous air pollution from oil and gas wells in urban, suburban, and other populated areas. The petition seeks to broadly expand regulation of production operations despite previous determinations by EPA that these production facilities create limited exposures. EPA also has implemented regulations on specific production emissions sources, such as glycol dehydration equipment. In December 2014, IPAA submitted comments to EPA urging it to reject the petition. No action has occurred on the petition.

12. Greenhouse Gas (GHG) Regulation

Clearly, future federal GHG regulation is an unsettled question. The Trump Administration decision to exit the Paris Accords on climate regulation will produce substantial shifts in this regulatory arena. In addition to the changing dynamics regarding methane regulations for oil and natural gas facilities (Subpart OOOO, Subpart OOOOa, CTGs, and the Methane Challenge), the Administration is acting regarding other regulations, most notably the Clean Power Plan (CPP).

Changes to the CPP are being developed and reviewed within the Administration. However, the regulatory process to alter the CPP will be complicated and challenged by environmental advocates and numerous states. Additionally, many states are developing their own regulatory actions to replicate the federal regulatory actions that they had anticipated under the CPP. These also are likely to be challenged at the state level by affected parties.

13. Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was enacted to address the increasing volume of municipal and industrial wastes. Subtitle C was established to manage hazardous wastes from cradle to grave to assure that hazardous waste is handled in a manner that protects human health and the environment. Subtitle D of RCRA regulates non-hazardous solid wastes. Most waste generated during oil and gas E&P is governed by Subtitle D because of the Bentsen Amendment to the 1980 RCRA legislation.

Since EPA's 1988 Regulatory Determination that RCRA Subtitle C was not appropriate to regulate oil and natural gas production wastes, environmental groups have tried, without success, to change RCRA or get EPA to revise its determination. However, in 2016, a collection of environmental groups filed a suit to compel EPA to act on oil and natural gas production wastes under Subtitle D. These groups argued that EPA (1) failed to undertake actions it listed in the 1988 Regulatory Determination to develop Subtitle D provisions for production wastes and (2) failed to meet mandatory requirements in RCRA that require a review of Subtitle D regulations every three years. While the Regulatory Determination argument had little merit, EPA was vulnerable for failing to meet a mandatory duty. Environmentalists regularly have been looking for opportunities to challenge agencies for failing to meet mandatory requirements because such failures are difficult to defend. They frequently lead to court orders for the agency to act in a time certain.

In December 2016, EPA agreed to a consent decree that requires it to make a determination by mid-March 2019 regarding whether it needs to create a Subtitle D regulatory program. EPA could conclude that it does not need to revise its rules – a logical conclusion because states have extensive production waste regulations and EPA has worked with them over the years. Such a conclusion would be appropriate and meet the mandatory requirement.

If EPA decided to develop a federal framework of production waste regulations under Subtitle D, it has little authority to compel states to adopt those regulations. However, the existence of such regulations can open opportunities for citizen suits against operators for failure to comply with the federal Subtitle D regulations even when operators are complying with state requirements. This may be the ultimate objective of the environmentalists' effort.

IPAA has encouraged EPA to act in 2017 to make a determination that no Subtitle D federal program is necessary because of the existing state programs. This would allow EPA to reaffirm this assessment in 2020 (the 3-year mandatory action date). Additionally, IPAA is working with state regulators to press EPA to conclude that it does not need to develop any Subtitle D regulations in 2017.

14. Safe Drinking Water Act – Induced Seismicity

Several federal agencies and numerous state agencies are evaluating the potential for linkages between produced water disposal and seismicity. This issue continues to draw attention and may lead to additional regulatory initiatives under the SDWA. Most action, currently, is taking place at the state regulatory level.

IPAA developed materials to educate policymakers and other stakeholders. Additionally, IPAA joined with other stakeholders to develop information through an effort managed by the Ground Water Protection Council (GWPC) and the Interstate Oil and Gas Compact Commission (IOGCC). This effort under the GWPC/IOGCC States First initiative developed a primer – Induced Seismicity by Injection Associated With Oil & Gas Development. It composites materials on induced seismicity with any relationship to oil and natural gas development and presents possible response approaches for state regulatory agencies to use if confronted with seismic events.

Recent seismic events, particularly in Oklahoma, continue to draw state and federal attention. However, actions continue to be state responses.

15. Safe Drinking Water Act – Exempted Aquifers

In March 2016, environmental groups, led by the Natural Resources Defense Council (NRDC), petitioned EPA to reconstruct the process for determining aquifer exemptions.

Under the SDWA, Underground Sources of Drinking Water (USDW) are required to be protected. However, the SDWA also provided a mechanism to exempt underground water formations from protection when they meet a variety of conditions, including volume of water, excessive total dissolved solids (TDS), and the presence of producible oil and natural gas. Many production areas using underground injection of produced water for secondary recovery, enhanced oil recovery, or produced water disposal depend on those formations being defined as exempted aquifers.

The NRDC petition seeks to reconstruct the exempted aquifer approval process to force more decisions to be shifted from regional EPA offices to its headquarters and to change the criteria for determining USDW to cover more underground water formations that are currently too saline to meet the TDS test. These proposals are clearly intended to deter and diminish oil and natural gas development.

In May 2016, EPA responded to the NRDC petition indicating that it was addressing many of the issues raised and did not believe the petition was necessary, but it did not directly reject the petition. With a new Administration in place, IPAA is urging EPA to reject the petition.

16. Offshore Bonding

On September 22, 2015, the Bureau of Ocean Energy Management (BOEM) issued proposed guidance that details the procedures it will use to determine a lessee's financial ability to carry out its obligations, primarily decommissioning for Outer Continental Shelf (OCS) facilities and providing additional security. A year earlier on August 19, 2014, BOEM issued an ANPRM with 54 questions aimed at updating its regulations on Risk Management, Financial Assurances and Loss Prevention. IPAA submitted detailed comments on the ANPRM that were largely ignored in the proposed guidance.

In July 2016, BOEM issued final guidance on offshore bonding. IPAA has long argued that a one-size-fits-all approach to financial assurance is unrealistic and not in the best interest of our member companies.

The new Trump Administration proposed a 6-month reprieve from compliance to examine the effects of the final guidance. Following the stay, the Administration will take necessary action to change the guidance as it sees fit to both protect the American taxpayers and ensure fair play for offshore developers.

17. Well Control

On April 17, 2015, the Bureau of Safety and Environmental Enforcement (BSEE) published a 264-page Notice of Proposed Rulemaking (NOPR) regarding the requirements for Blowout Preventer Systems and Well Control. IPAA appreciates the great strides industry has taken since Macondo to enhance safety measures and response protocols. However, many of the advances in safety and best practices were ignored in the proposed rule, resulting in greater safety risks and potentially thwarting all future offshore development. Some of the most egregious parts of the draft rule are the drilling margin, casing and cementing, and the real-time monitoring proposal. On April 28, 2015, IPAA sent a letter to BSEE requesting a 120-day extension. On June 2, 2015, a 30-day extension was granted. IPAA submitted detailed unified comments with several trades on July 16, 2015, contending that the rule, as drafted, is unworkable and needs to be rewritten.

The final well control rule was issued April 13, 2016, and was implemented on July 28, 2016. With the new Trump Administration, IPAA has joined with API and other trade associations to work on improving the rule. Secretary Zinke outlined this issue as a top priority in his Secretarial Order on offshore energy development on May 3. On May 17, IPAA, API, and other trades submitted a joint letter to DOI detailing improvements that could be made to the Well Control Rule. IPAA stands ready to work with the Administration to improve safety and ensure responsible development.

18. Offshore Air Quality Rule

On April 5, 2016, BOEM issued a proposed rule for clean air reporting and compliance. IPAA worked with other trade associations to submit joint comments in the summer of 2016 focusing on issues with measurement points and the methodology used by BOEM in the creation of this rule. There are many components that are concerning, including BOEM inclusion of mobile support craft in its proposed definition of facility and requiring information and modeling as part of submitted plans. In addition, there would be a lack of grandfathering with the requirement for lessees to re-submit previously approved plans at least every ten years to verify compliance with BOEM's current air quality regulations, including the new information gathering and reporting requirements.

The previous Administration did not complete a final rule on offshore air. IPAA and other trade associations will continue to work with the Trump Administration to ensure they have correct information while making a decision on how to handle air quality in the offshore space. IPAA hopes to work with the current Administration to ensure future Administrations will be unable to finalize a harmful offshore air rule that does not allow for flexibility for the complexity of offshore development.

19. Extractive Industries Transparency Initiative

The Extractive Industries Transparency Initiative (EITI) is a global coalition of governments, companies, and civil society working together to improve openness and accountability of revenues from natural resource production through reconciliation by Independent Administrators (IA) of the amounts companies paid to government, with the amounts government collected. The Obama Administration committed the U.S. government to implement EITI, focusing on oil, natural gas, and hard rock mining revenues from production on federal lands. DOI is the lead agency for this voluntary effort. The transparency effort began with DOI's ONRR unilaterally publishing in December 2014 the amount paid, by company, for bonuses, rents and royalties on federal lands. Companies paying above a certain threshold were asked to voluntarily reconcile their payments for the first U.S. report, which was published and submitted for approval to the global EITI board in December 2015.

Under the Trump Administration, DOI is reviewing the U.S. level of participation. The Multi-Stakeholder Group (MSG) implementing EITI will be considering different options, from a temporary voluntary suspension from EITI, to withdrawal. IPAA is a member of the MSG. ONRR is expected to continue with its unilateral reporting.

20. Pipeline Safety

DOT's PHMSA continues its consideration of the NOPR on Safety of Gas Transmission and Gathering Lines. PHMSA's Gas Pipeline Advisory Committee (GPAC) is reviewing staff recommendations directly affecting transmission lines and has deferred consideration of gathering lines until Fall 2017. The NOPR would greatly expand PHMSA's jurisdiction over gathering and would encroach on production facilities, based on the proposed definitions. IPAA worked with a number of state cooperating associations and AXPC on comments submitted July 7, 2016, strongly opposing any changes to the existing definitions for *production operation* and *gathering line* based on a legislative and regulatory history of the current regulatory regime. IPAA is working with API and GPA Midstream Association to ensure that gathering interests are represented on the GPAC, submitting a letter to DOT Secretary Chao in June. IPAA also is working with API and member companies to update the regulatory framework that has governed regulation of gathering, RP80. The NOPR would eliminate

reference to RP80 in PHMSA's regulations. The update to RP80 is intended to address PHMSA's concerns regarding large diameter, high-pressure gathering lines that have the characteristics of transmission lines.

PHMSA's Final Rule on Safety of Hazardous Liquid Pipelines was issued in January 2017 but did not get published prior to the beginning of the Trump Administration. Therefore, DOT withdrew the rule. Although the rule was withdrawn, the final rule stated that PHMSA "determined that in order to decide whether and to what extent to regulate gathering lines, as permitted by Congress,..." PHMSA would need further information from gathering lines. This finding is significant, as it acknowledged that, absent further data, PHMSA lacked congressional authorization to impose additional regulations on gathering lines.

21. Financial Reform

In February, President Trump signed the CRA disapproval of Sec.1504 of Dodd-Frank. The final rule would have required an issuer to disclose payments made to the U.S. federal government or a foreign government if the issuer engages in the commercial development of oil, natural gas, or minerals. Under the CRA, the rule cannot be reissued in a "substantially similar" form.

22. Opposition to Pipeline Infrastructure

Groups advocating an anti-fossil fuel agenda have increasingly focused on infrastructure as a means to keep fossil fuels in the ground. Extreme environmental groups have targeted the Federal Energy Regulatory Commission (FERC), contending that the agency "rubber stamps" natural gas pipelines, and have pushed for environmental reviews to encompass upstream and downstream environmental impacts from production. FERC consistently has rejected such calls, noting that FERC does not have jurisdiction over production. IPAA has continued to file comments at FERC in support of new pipeline projects to offset the numerous comments submitted by individual citizens opposing pipelines. FERC currently has only two sitting commissioners, leaving the agency without a quorum. The Senate Energy Committee has approved two Republican nominees, which would restore a quorum. However, it may prove difficult to find time on the Senate calendar for a final vote.