IPAA
INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

Making America Great Again

Transition Team Regulatory Issues: American Oil and Natural Gas Production

INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA
1201 15th Street, NW, Suite 300 | Washington, DC 20005 | 202.857.4722

November 29, 2016

The Honorable Mike Pence
Vice-President Elect
2017 Transition Team
Washington, DC

Regulatory Issues Affecting American Independent Oil and Natural Gas Producers

The following materials have been prepared by the Independent Petroleum Association of America (IPAA) to identify key regulatory policy and regulation issues that adversely affect the development and production of American oil and natural gas resources. These issues are largely a result of actions or interpretations developed by the Obama Administration. IPAA requests that the incoming Trump Administration address these burdens as a part of its initiatives to reduce inappropriate regulatory restrictions and enhance American energy production.

Overview

For over 85 years, IPAA has represented thousands of the nation's independent oil and natural gas producers. These independents are the primary producers of America's supply of these resources – developing 90 percent of American oil and natural gas wells, accounting for 54 percent of America's oil production and 85 percent of its natural gas production, and supporting over 2 million American jobs. IPAA's 9,000-plus member companies play a critical role in the nation's overall economic vitality, healthy environment and national security.

Consider the following:

- **Jobs.** Nearly two-thirds of America's independent producers are small businesses. Onshore independent producers supported 2.5 million American jobs and offshore independents operating in the Gulf of Mexico accounted for more than 200,000 jobs, according to the most recent study conducted by IHS Global Insight.
- **Economic Benefits.** Billions of dollars ($131 billion) are injected into the American economy every year by the oil and natural gas industry, in the form of royalties, taxes, bonus payments, and salaries paid to the millions of individuals employed by these companies, with capital expenditures at $62.6 billion. According to IHS Energy from 2008–13, while U.S. GDP growth averaged 1.2% per year, economic output in the oil and natural gas industry grew four times faster, at 4.7%. Over the same period, total U.S. employment declined by 0.1%, while oil and natural gas industry employment grew 4.3% per year. More broadly, the revolution in the production of "unconventional" oil and natural gas was one of the major contributors to the U.S. economic recovery; it is estimated by IHS to have added nearly 1% to U.S. GDP annually, on average, over those six years, explaining nearly 40% of overall GDP growth in that time.
- **Manufacturing.** The White House National Economic Council recently released a report entitled "Revitalizing American Manufacturing" which finds that since early 2010,

U.S. manufacturing has added over 800,000 direct jobs. The White House links this directly to shale production: "The surge in American natural gas production has lowered energy costs for manufacturers and driven job growth." In 2014 PricewaterhouseCoopers put out a report, which stated that the annual cost savings to the manufacturing sector from shale gas could mean $22.3 billion by 2030 and $34.1 billion by 2040. This saving, in turn, would lead to 930,000 shale gas-driven manufacturing jobs by 2030 and 1.41 million jobs by 2040.

- **Emissions.** The Energy Information Administration is projecting 2016 U.S. energy-related carbon dioxide emissions will be at their lowest levels since 1992. The EIA could not have been clearer as to the reason CO_2 emissions will fall to their lowest levels in 24 years: "The drop in CO_2 emissions is largely the result of low natural gas prices, which have contributed to natural gas displacing a large amount of coal used for electricity generation."
- **Decrease in Oil Imports.** According to Energy Information Administration (EIA), net oil imports were 60.3 percent of products supplied in 2005. In 2015, U.S. net imports (imports minus exports) of petroleum from foreign countries were equal to about 24% of U.S. petroleum consumption, the lowest level since 1970.

Yet, many of these benefits are threatened by low commodity prices and activists who deceive the public and insist on keeping all fossil fuels 'in-the-ground.'

Since June 2014 when oil prices peaked, the producers and affiliated industry have reduced U.S. employment by more than 94,000 jobs. These have been high paying manufacturing jobs that benefit the middle class.

From June 2014 through September 2015, the market capitalization of oil and natural gas production companies has fallen by over $1.3 trillion. While historically, independent producers have reinvested as much as 150 percent of their cash flow back into U.S. production activities, the EIA estimates that from June 2014 to June 2015, 83% of companies' operating cash was being devoted to debt repayments. Capital access will continue to be a challenge for the industry and cash flow will be essential to maintain and – when the time is ripe – expand U.S. production.

While U.S. oil production reached 9.6 million barrels/day in 2015, decreased oil prices have resulted in a drop of 450,000 barrels/day of U.S. production, partially compounded by lower international prices displacing U.S. crude oil in some East Coast refineries. Similarly, the natural gas market has been suppressed for several years as aggressive U.S. development has generated a 100-year supply. Liquefied natural gas exports and expanded U.S. manufacturing could offer stability in this commodity, but developing these markets and completing these projects will take years.

In a period of low commodity prices, it is imperative that federal, state and local government work with – not against – the industry in promoting and continuing these benefits. The advancement of this strategic industry should be at the center of our nation's energy policy.

The role of independent producers can be shown in the following graphics:

ENERGY AND INDEPENDENT PRODUCERS

IPAA
INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

INDEPENDENT PRODUCERS develop **90% of the wells in the United States**—producing 54 percent of America's oil and 85 percent of America's natural gas. IPAA's **9,000-plus** member companies play a critical role in the nation's overall *economic vitality, healthy environment* and *national security*.

▶ VITALIZING THE ECONOMY.

Independent producers are responsible for up to four percent of U.S. gross domestic product (GDP), generating $131 billion in federal and state taxes and $62.6 billion in capital expenditures. Our industry plays a critical role in the U.S. economy and also provides two million jobs for America's workforce.

1.7 Million

"Employment attributed to upstream unconventional oil and natural gas activity will **support more than 1.7 million jobs in 2012**, growing to some 2.5 million jobs in 2015, 3 million jobs in 2020, and 3.5 million jobs in 2035." IHS CERA

Oil and gas activity and relate chemical manufacturing added **$1,200 to real disposable income** per U.S. household in 2012. IHS CERA

The U.S. average annual wage in the oil and gas industry was about **$107,200 in 2012,** double the national average. Bureau of Labor Statistics

U.S. shale development saved consumers an average of **40 cents per** gallon of gasoline this spring. AAA

33% In Pennsylvania, ratepayers enjoyed a **33 percent drop** in natural gas rates since 2008. Houston Chronicle

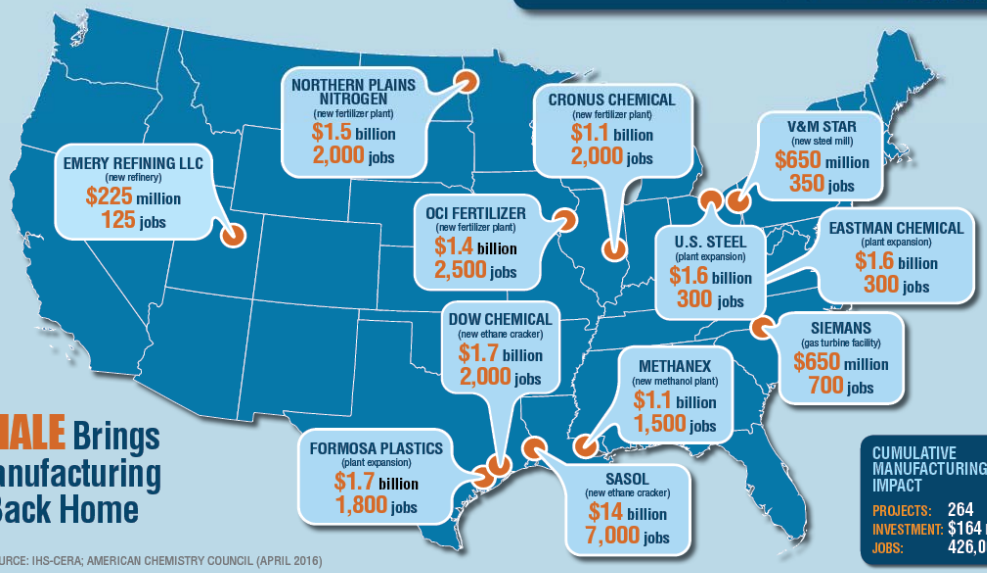
129% In Ohio, residents would have had to pay up to **129 percent more** for their heating in January 2014. Toledo Blade

"Low natural-gas prices have been a **godsend** to low-income families." Action for Boston Community Development

Between 2008 and 2012, **natural gas prices declined by over 60 percent,** providing an energy savings of more than **$110 billion to the U.S. economy.** EIA

"Oil prices were between **$12 and $40 per barrel lower in 2013**" than they would have been without hydraulic fracturing." ICF International

"New U.S. oil supplies have helped to **cap the price spikes** caused by severe global supply disruptions and to moderate oil process for consumers." Center for New American Security



SHALE Brings Manufacturing Back Home

CUMULATIVE MANUFACTURING IMPACT
PROJECTS: 264
INVESTMENT: $164 billion
JOBS: 426,000

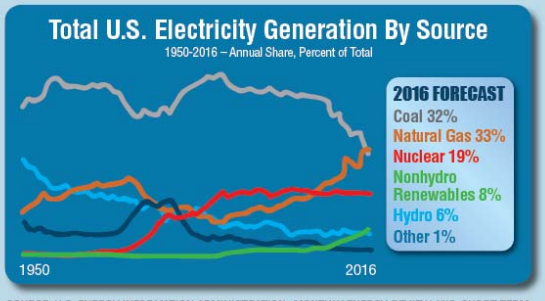
SOURCE: IHS-CERA; AMERICAN CHEMISTRY COUNCIL (APRIL 2016)

INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA | WWW.IPAA.ORG

ENERGY AND INDEPENDENT PRODUCERS

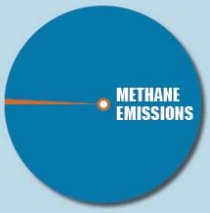
▶ IMPROVING OUR ENVIRONMENT.

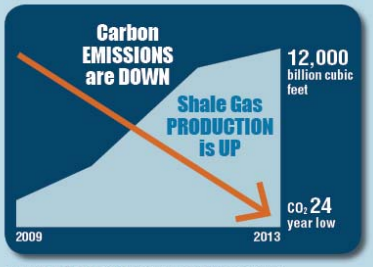
Clean, abundant, affordable and reliable: natural gas is now the nation's top source for generating electricity. While natural gas production has increased substantially, carbon dioxide and other emissions are down dramatically—resulting in some of the cleanest air and atmosphere the United States has seen in 20 years.



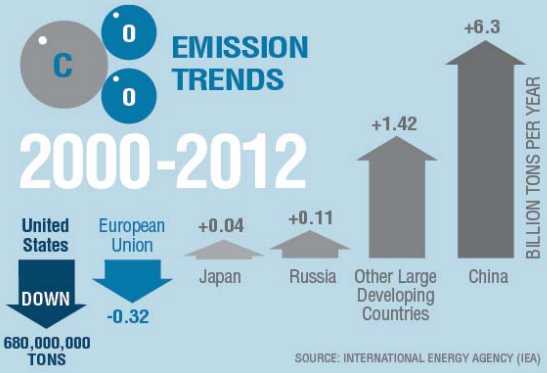
SOURCE: U.S. ENERGY INFORMATION ADMINISTRATION, *MONTHLY ENERGY REVIEW*, AND *SHORT-TERM ENERGY OUTLOOK* (MARCH 2016)

Methane emissions from **oil and natural gas exploration and production** account for only **1.83%** of total U.S. greenhouse gas emissions.





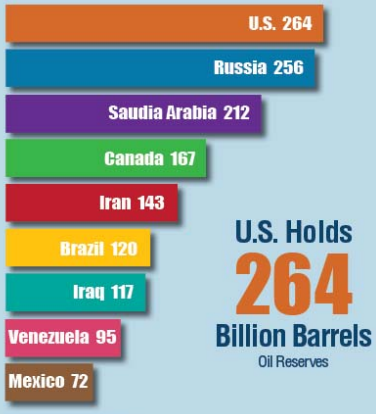
SOURCE: U.S. ENERGY INFORMATION ADMINISTRATION



SOURCE: INTERNATIONAL ENERGY AGENCY (IEA)

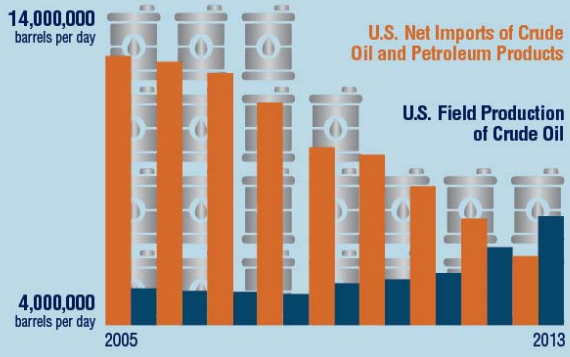
▶ ENHANCING OUR NATIONAL SECURITY.

The United States is now the global leader in oil and natural gas production. As the United States continues to increase energy production using efficient and sustainable methods, our industry literally fuels the U.S. economy and improves economic and national security by reducing our dependence on foreign oil.



U.S. Holds 264 Billion Barrels Oil Reserves

SOURCE: RYSTAD ENERGY



Specific Issues

The following materials are organized into five categories:

1. Executive Orders, Memorandums, Guidance
2. Policies
3. Potential Regulations
4. Regulations in Litigation
5. Regulations in Place

IPAA requests that the following actions occur for the categories.

Executive Orders, Memorandums, and Guidance are items that should be withdrawn and revised or eliminated solely by Executive action.

Policies are similarly positioned; they can be reviewed and altered by the incoming Administration.

Potential Regulations should be suspended until the Administration can determine what course of action it chooses to take. However, some of these are driven by litigation or petitions for action. For example, environmentalists' litigation to compel EPA action to regulate oil and gas production wastes under Subtitle D of the Resource Conservation and Recovery Act could result in a judicial requirement for regulatory action. Similarly, an environmentalist petition for EPA to change long standing policies working with states to manage exempted aquifers under the Safe Drinking Water Act could lead to future litigation that would shift the regulatory decisions to federal court control if EPA fails to act to preserve its current program.

Regulations in Litigation will require consideration by the Administration regarding whether it wants to proceed with the current litigation or whether it should reconsider the litigated regulations and choose an alternative course. If so, it will require individual actions in each pending case.

For Regulations in Place, the Administration needs to determine whether the current enforcement pattern for the regulations is appropriate, whether revisions are needed, or whether guidance can address the burdens imposed by the regulations.

For each issue that is identified, there is a numerical reference to a more detailed description of the issue in the Regulatory Details portion of the document.

IPAA believes that the Trump Administration has a unique opportunity to act both independently and in conjunction with the 115th Congress to address the excessive regulatory onslaught of the Obama Administration on the American energy economy and on oil and natural gas production specifically. There has never been a time when more extensive, restrictive and unwarranted policies and regulations have deluged American oil and natural gas production. No one argues that cost effective, sound environmental regulations are necessary for all industrial operations. But, the recent actions to overwhelm energy production are unprecedented and unjustifiable. Executive branch actions need to be withdrawn, reviewed and reconsidered. IPAA believes these new policies and regulations will fail to meet any reasonable test.

IPAA requests that the transition team move quickly to include the issues that are identified here to its agenda for regulatory review and reform.

Sincerely,

Barry Russell
President and CEO

Attachment

- **Executive Orders, Memorandums, Guidance**
  - Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (23)
  - Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866 (12.a)
  - Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment (2.d)
  - OSHA – Severe Violator Enforcement Program (28)

- **Policies**
  - BLM – Mitigation Policy (2.f)
  - DOI – Extractive Industries Transparency Initiative (19)
  - FEMA – Limits on Subsurface Uses of Hazard Mitigation Assistance Acquired Lands (30)
  - FWS – Umbrella Mitigation Policy (2.d.i)
  - FWS – Candidate Conservation Agreement with Assurances Policy (2.d.ii)
  - FWS – Habitat Conservation Plan Handbook (2.d.iii)
  - FWS – Listing Decision Process (2.a)
  - FWS – Monarch Butterfly – Center for Biological Diversity Lawsuit (29.a)
  - FWS – Lesser Prairie Chicken – "Emergency" Petition to list Distinct Population Segments (29.b)
  - OSHA – Multicontractor Workplace (27)
  - SEC – Climate Related Investigations (26)
  - USCG – Barge Transportation of Produced Water (25)
  - USFS – Mitigation Policy (2.d.v)

- **Potential Regulations**
  - BOEM – Offshore Five-Year Plan (24)
  - BOEM – Offshore Air Emissions (18)
  - CFTC – Hedging (31)
  - Corps – Nationwide Permits (10.b)
  - EPA – Methane Emissions – Nationwide Existing Sources (11.b.ii)
  - EPA – Exempted Aquifers (15)
  - EPA – RCRA – Subtitle D (13)
  - FWS – MBTA – Incidental Take Permits (2.b)
  - FWS – ESA Listing Decisions (2.a)
  - OSHA – Process Safety Management (7)
  - PHMSA – Tanker Car Regulations (8,9)
  - PHMSA – Hazardous Liquids (20)
  - PHMSA – Gas – Gathering Lines (20)

- **Regulations in Litigation**
  - BLM – Drilling Regulations (1)
  - BLM – Venting and Flaring (11.b.iii)
  - BLM – Increased Onshore Royalties (included in Venting and Flaring Rule) (4)
  - Corps/EPA – WOTUS (10.a)

- EPA – Methane Emissions (11.b.i)
- EPA – Ozone NAAQS – CTGs (11.b.ii)
- FWS – Sage Grouse Resource Management Plans (29.c)
- FWS – Northern Long-Eared Bat 4(d) Rule (29.d)

- **Regulations in Place**
  - BLM – Onshore Orders 3, 4, 5 (3)
  - BOEM – Offshore Financial Assurance and Risk Management Requirements – Notice to Lessee (16)
  - BSEE – Offshore Well Control Rule (17)
  - EPA – UOG ELG Pretreatment Standards (10.c.i)
  - EPA – Subpart OOOO – Enforcement Actions (11.a)
  - FWS – Critical Habitat Final Rules (plus Adverse Modification, 4(b)(2) policy) (2.c)
  - FWS – Compensatory Mitigation Policy for ESA (2.d.iv)
  - OCC – Energy Lending (22)
  - ONRR – Amendments to Civil Penalty Regulations (5)
  - ONRR – Consolidated Federal Oil & Gas and Federal & Indian Coal Valuation Reform (5)
  - OSHA – Silica (6)
  - PHMSA – Crude Oil Testing – Trucking (9)
  - SEC/CFTC – Dodd-Frank/SEC Section 1504 (21)

Regulatory Details

1. Bureau of Land Management Drilling and Hydraulic Fracturing Rulemaking

On March 21, 2015, the U.S. Department of the Interior (DOI) released its final rule regulating hydraulic fracturing activities on federal lands. This 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 written, this rule will be difficult and costly to comply with for industry, and the Bureau of Land Management (BLM) has had no clear plan on how to properly train field staff to act on the new measure. The rule is unnecessary and will add another layer of burden to independent producers already struggling to navigate the complex and confusing regulatory program governing federal lands.

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. On September 30, less than two weeks after the close of the Administrative Record, Judge Skavdahl granted IPAA's motion for PI, stating "Congress has not authorized or delegated to the BLM authority to regulate hydraulic fracturing and, under our constitutional structure, it is only through Congressional action that the BLM can acquire this authority."

On June 21, 2016, Judge Skavdahl struck down the BLM's final rule. Judge Skavdahl concluded that BLM does not have the congressional authority to regulate hydraulic fracturing on federal lands. As expected, an appeal was filed to the 10th Circuit Court. Opening briefs were submitted by all parties. Oral arguments are now scheduled for January 17, 2017.

This burdensome permit program should be addressed early in 2017.

2. Endangered Species

a. Petitions

On May 18, 2015, the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS; collectively, the Services) announced a suite of regulatory changes through a Notice of Proposed Rulemaking (NOPR) for petitions to list species or designate critical habitat. In general, the proposed rule would revise and expand the scope of procedural requirements for submittal of petitions to the Services and clarify the standards for making findings as to whether a petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. These changes would help address some of the abuse of the petition process and submitted delayed comments on September 18, 2015.

On April 21, 2016, the Services issued changes to the 2015 proposed regulations for the receipt of petitions. IPAA and the American Petroleum Institute (API) submitted a short comment letter on May 23, 2016, that highlighted many of the comments they made in 2015, including support for limiting petitions to one species, how the state notification component was watered down, and that the 2016 proposal further limited documentation of supporting scientific or commercial data.

On September 27, 2016, the Services issued their final rules to the changes concerning petitions. Among other changes, the new rules mandate that petitions to list a species provide a balanced presentation of the facts,

including any information that contradicts the request to list a species. The rule requires that a petition only provide new information or analysis not presently used in a final agency action. Additionally, the rule eliminates the 30-day requirement for the Services to respond to petition requests as well as institutes a mandate to notify the State Wildlife Agency of the petitioner's intent to file. While the new rules will help with coordination on petitions, the rules fail to achieve many of the long-term sue-and-settle challenges of the Endangered Species Act (ESA). This rule is effective as of October 27, 2016.

b. Migratory Birds

On May 26, 2015, the FWS published a Notice of Intent (NOI) to prepare a programmatic environmental impact statement to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the 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, the authority and direction of this NOI IPAA raises.

On May 17, 2016, IPAA hosted an environmental regulatory conference in Washington, D.C., where the Service's main architect of this proposal, Bob Dreher (who left FWS in June), spoke to the group. Among other things, he outlined three goals that the FWS is considering to manage incidental take under the 1918 MBTA: 1) avoiding stressors causing take; 2) minimizing the production of stressors or species exposure to the stressors causing take; and 3) compensating for residual take. The FWS is considering four options:

- Continue voluntary guidance and compliance with best management practices (No Action Alternative)
- Establish the process of general authorizations for industry hazards with known mitigation measures
- Establish a process for providing individual permits
- Establish the ability to authorize incidental take in programmatic agreements with federal agencies.

Although the NOPR and the Draft Environmental Impact Statement were listed in the Unified Agenda for publication in October 2016, FWS did not meet the schedule due to concern over this program from key renewable energy groups.

c. Critical Habitat

On June 26, 2014, the FWS and the NMFS proposed three significant changes to their regulations and policies regarding critical habitat under the ESA. While the final rules were scheduled to come out in June, all are now at the Office of Management and Budget (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. These rules are excessively broad and concentration too much authority in the agency.

d. FWS 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 the Environmental Protection Agency (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."

i. FWS Mitigation "Umbrella" Policy

On March 8, 2016, FWS issued proposed revisions (FWS-HQ-ES-2015-0126) to its mitigation policy that would provide a policy framework for applying a landscape-scale approach to achieve, through application of mitigation hierarchy, a net gain, or no net loss, in conservation outcomes. On May 10, 2016, the FWS extended the comment deadline until June 13, 2016. On September 21, the Senate Environment and Public Works Committee held an oversight hearing that pushed back on the authority of the "no net loss" principle as well as the statutory framework in the FWS umbrella mitigation policy.

Some specific concerns with these regulations are:

- By adopting the goals of "net conservation gain" and "no net loss," the FWS inappropriately attempts to rewrite the statutory standards under the ESA and the Marine Mammal Protection Act (MMPA), as well as the regulatory standards implementing section 404 of the Clean Water Act (CWA). No legal basis exists for this standard, and its onerous requirements and ambitious standards will lead to delays in federal approvals and authorizations.
- The Draft Policy improperly expands FWS authority over unlisted fish and wildlife. Authority asserted by FWS is defined so broadly that it effectively would allow the Service to require mitigation of any impacts to the natural environment in the United States. The Draft Policy inappropriately expands the Service's authority by allowing the Service to "veto" development projects. It would further delay development by requiring that mitigation be implemented before impacts occur while also compounding the mitigation requirements such that the mitigation requirements bear no relationship to the actual impact of a project.
- The Draft Policy leaves significant decisions to the discretion of individual FWS employees. Given that FWS is frequently sued for failing to meet its obligations under the ESA, the Service cannot realistically assume responsibility for overseeing mitigation efforts as envisioned in the Draft Policy.
- The public has not had a meaningful opportunity to comment on the FWS mitigation strategy. The Draft Policy reflects only one part of a larger mitigation strategy that FWS is unveiling in bits and pieces. The public must have the opportunity to review the entire strategy and assess how it integrates with other elements as a whole. Further, FWS has not complied with procedural requirements under the Administrative Procedure Act, nor has it disclosed the legal authority on which it is based. FWS also has failed to prepare a regulatory flexibility analysis as required by the Regulatory Flexibility Act.

ii. Candidate Conservation Agreements with Assurances (CCAA) Planning Handbook Draft Revisions

Oil and natural gas producers support policies and programs designed to incentivize voluntary conservation measures by property owners that can benefit at-risk species, particularly through flexible tools like a CCAA (including in the multi-state example of the lesser prairie chicken). On May 4, 2016, the Services published a draft revised policy which proposes adding the term "net conservation benefit" as well as other changes to its regulations regarding CCAAs to make them consistent with the proposed policy changes. A better approach would be for the Service to withdraw the revised policy and proposed rule and instead focus its efforts on streamlining and reducing the costs to develop CCAAs and identifying additional incentives for property owners to use them. The Services seek to finalize the policy and regulations by the end of the current Administration.

iii. Habitat Conservation Plan (HCP) Handbook

For years, many oil and natural gas producers have initiated voluntary habitat conservation plan processes. Some of the greatest concerns are that the process is too costly and inefficient and that results are uncertain. Despite the goals to fix these wrongs, on June 28, 2016, the Services published their 391-page draft HCP Planning Handbook which only further complicates these issues. While the handbook should provide guidelines for developing and processing HCPs subject to the existing statutory and regulatory requirements, the draft handbook ostensibly creates a series of obstacles that the applicant must successfully traverse to avoid a denial of application. Further, the handbook attempts to impose mitigation requirements that mandate a "net benefit" goal and a "no net loss" standard. FWS is expected to publish and finalize the handbook this fall.

iv. Compensatory Mitigation for ESA

Building on the themes from the FWS "umbrella" mitigation policy and the aforementioned policies implementing the Presidential Memorandum, on September 2, 2016, FWS announced a draft policy that necessitated a shift from project-by-project to landscape-scale approaches to planning and implementing compensatory mitigation under the ESA. If left unchanged, this would only make the FWS approach to mitigation more opaque and unpredictable due to a huge policy shift. Further, this draft policy continues a suite of mitigation-related policies that will only serve to undermine the effectiveness of conservation programs implemented under the ESA. Numerous industry groups have submitted comments outlining these concerns as well as several arguments challenging the authority of the FWS to promulgate such a policy.

v. Forest Service Mitigation

Much like the FWS and the BLM, the U.S. Forest Service is moving forward with its own changes to implement the November 3, 2015, Presidential "no net loss" Memorandum into its regulatory framework. On April 6, 2016, the Forest Service announced via webinar that it will implement mitigation in two parts. The first would be a regulation that establishes clear goals for the use of mitigation on National Forest System lands. The second would be a detailed set of directives in the Forest Service Manual and Handbook that clarifies methods, tools, and their appropriate use. The draft regulation was anticipated by June 1, 2016, with a comment period to follow. This timeline was not met, and as of the printing of this memorandum has not been released. Public input on draft directives is expected in late 2016 or early 2017, and the final directives are scheduled to be completed by the end of November 2017.

e. 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 units of the NPS.

Highlighting that present 9B regulations are effective at equipping the NPS to carry out its responsibilities clearly, as well as the well-established principle of common law, these changes are duplicative, burdensome, and unnecessary.

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

On February 24, 2014, FWS issued an advanced notice of proposed rulemaking (ANPR) to impose regulations that would provide an uncertain and inconsistent regulatory environment for oil and gas operations on refuges. The main objections to the ANPR 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. It is anticipated that the rules will be finalized this winter.

f. BLM Planning / Mitigation

On February 25, 2016, BLM proposed a Resource Management Planning (RMP) Rule. The proposed rule changes BLM's RMP planning process to allow more public comment, which likely will delay projects and increase costs. It also departs from BLM's statutory charge to manage public lands on the basis of multiple use and sustained yield. It also introduces further uncertainty by proposing numerous provisions that create ambiguous standards or expand agency discretion.

BLM also is working on a policy manual that would further implement the new mitigation standard, and that is expected in 2016.

g. Forest Service Mitigation

Much like the FWS and the BLM, the U.S. Forest Service is moving forward with its own changes to implement the November 3, 2015, Presidential "no net loss" Memorandum into its regulatory framework. On April 6, 2016, the Forest Service announced via webinar that it will implement mitigation in two parts. The first would be a regulation that establishes clear goals for the use of mitigation on National Forest System lands. The second would be a detailed set of directives in the Forest Service Manual and Handbook that clarify methods, tools, and their appropriate use. The draft regulation was anticipated by June 1, 2016, with a comment period to follow. However, the draft has been delayed, which will delay any final regulation, which had been expected by the end of October 2016. Public input on draft directives is expected in late 2016 or early 2017, and the final directives are scheduled to be completed by the end of November 2017.

3. <u>BLM Onshore Orders</u>

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. Although there may be a need to update equipment standards and reporting procedures involving the Onshore Orders, BLM is describing sweeping changes.

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. Industry 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, BLM has grossly underestimated cost. The agency chose 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 its final Rules for Onshore Order Nos. 3, 4, and 5. These rules will be costly to the industry, as they will all be implemented simultaneously.

4. BLM Onshore Royalty Revisions

Buried in the BLM's Venting and Flaring rule (Item 11.b.iii. below) is a section about production subject to royalties. The language lifts the lock on the federal onshore royalty rate allowing BLM to set new royalty rates at or above 12.5%. This means that an Administration would be able to set a new royalty rate at any time which would provide uncertainty for independent oil and natural gas producers. Furthermore, a situation could arise where different royalty rates are set for different lease sales in different areas further adding to confusion for lessees.

5. Office of Natural Resources Revenue (ONRR) Rulemakings

In 2014, the Office of Natural Resources Revenue (ONRR) within DOI issued a proposed rulemaking relating to an overhaul of ONRR's civil penalty regulations. Although ONRR claims the changes are intended to clarify the current regulations, the proposal makes significant revisions to the regulations. Specifically, the agency intends to create new penalties on incorrect reporting by using civil penalties for knowing or willful violations, while at the same time stripping a lessee's legal and procedural rights. ONRR is unnecessarily tightening its ability to impose penalties when it believes royalties are not being paid properly. Additionally, ONRR may impose penalties on an operator/lease owner even if a contractor is the cause of a problem – unbeknownst to the operator/lease owner – while barring companies from legal recourse. This regulation was finalized and published in the Federal Register on August 1, 2016.

Additionally, in 2015, ONRR proposed an Advanced Notice of Proposed Rulemaking (ANPR) related to royalty valuation. The ANPR changes the regulations on gas valuation for royalty reporting and payment by oil and gas lessees on federal lands and the Outer Continental Shelf (OCS). The final rule was published in the Federal Register on July 1, 2016.

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:
    - Use engineering controls to limit worker exposure to the PEL.
    - Provide respirators when engineering controls cannot adequately limit worker access to high-exposure areas.
    - Develop a written exposure control plan.
    - 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 (PSM)

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.

PSM standards are a program that has been developed in the context of manufacturing operations that are operated with 24 hour/day staffing. This is wholly inconsistent with oil and natural gas production operations that are largely unmanned most of the time. Application of PSM to oil and natural gas production operations will be costly and unnecessary.

8. Regulation of Tanker Cars Hauling Crude Oil by Rail

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.

Additional efforts have been directed toward controlling the vapor pressure of crude oil – more specifically, Bakken crude oil – as it is shipped on tanker cars. Numerous studies have demonstrated that crude oil produced from the Bakken formation is no more volatile or dangerous than any other light, sweet crude produced and transported in North America. Nevertheless, North Dakota has limited the allowable vapor pressure of Bakken crude oil to assure it is considered stable. Despite these actions, crude oil rail transportation continues to be challenged in local communities.

9. PHMSA Testing and Sampling Requirements for Crude Oil

As part of PHMSA's rulemaking governing tank car standards for shipping crude oil by rail, companies were required to develop sampling and testing protocols to ensure crude oil offered for transport was accurately identified by packing group. The rulemaking was titled to apply only to transportation by rail and was issued jointly with the Federal Railroad Administration. Producers outside North Dakota largely assumed this sampling and testing program would only apply to those shipping crude oil by rail car.

In the months since the rule went final in July 2015, PHMSA enforcement officers have been conducting spot visits to operations to review operators' sampling and testing programs for tank trucks. While PHMSA claims that it is not yet levying fines, PHMSA is forcing companies to comply with a sampling and testing program within a short time frame, without the benefit of industry input. Industry continues to talk with PHMSA representatives on the need for such industry input on what should be included in a sampling and testing program. Such input was precluded by the inaccurate characterization of PHMSA's rulemaking. If the testing program for tank cars is applied to tank trucks, it will be excessively burdensome and unworkable because of the differences between rail operations and truck operations.

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.

The final rulemaking broadly expands EPA's authority beyond the already far-reaching applications of the CWA that affect the permitting and compliance activities of the oil and natural gas industry.

IPAA opposed the final WOTUS rulemaking and has worked with other affected industries 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 WOTUS rule has been suspended until the courts can resolve these disputes. Arguments regarding the regulation span a significant scope. On November 2, 2016, more than 30 states and state agencies, along with several business groups, urged the Sixth Circuit to strike down the rule aiming to clarify jurisdiction under the CWA, arguing states' authority is being usurped. Resolving this complex issue early in 2017 to comport it with the intent of the CWA would settle the ongoing efforts to excessively expand the scope of the CWA.

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 must be renewed in March 2017. The Corps of Engineers proposed reissuance of NWPs essentially as they have been in the past.

However, NWPs have become 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. If the effort is successful, not only pipelines but portions of production operations that have previously fallen under the NWP process could be exposed to the full Section 404 permitting process.

Currently, the final NWP proposal is undergoing interagency review. It is likely to be completed and the revised NWP issued in late 2016 or early 2017 in order to meet the March 2017 deadline.

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). EPA did not undertake any analysis regarding whether such an ELG was needed. EPA argued that it must create an ELG to prevent and/or strictly regulate produced water (from fossil fuel extraction operations) from going to POTWs. As justification for its proposed rulemaking, EPA argued that the regulation only maintains current industry practice by encouraging recycling or requiring permanent disposal pursuant to the Underground Injection Control (UIC) Program of the Safe Drinking Water Act (SDWA). EPA also argued that a number of states requested that EPA promulgate an ELG to deal with this issue. The desire to create a Shale Gas Extraction (SGE) ELG likely originated with reports of elevated bromide levels in Pennsylvania waterways. However, the Pennsylvania Department of Environmental Protection (DEP) prohibited any produced water from Marcellus Shale wells from being sent to Pennsylvania POTWs. In virtually all other oil and natural gas producing states, produced water is disposed pursuant to the SDWA UIC program – which is already a federally regulated practice. In current commodity price environments, less drilling for oil and natural gas is taking place. As such, there are fewer opportunities to recycle wastewater, and more wastewater disposal is required. Regulatory uncertainty surrounding the UIC programs exists in certain states. Therefore, a rigid, one-size-fits-all ELG standard is unworkable, particularly in light of the fact that an SGE ELG is not needed since the CWA provides for a flexible permitting process, Best Professional Judgment (BPJ). Producers need options to dispose of produced water and should be able to discharge if requisite treatment standards are met.

EPA proposed 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 BPJ. Consequently, EPA should develop an actual technology-based ELG. Instead, EPA has chosen 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 SDWA 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.

However, on June 9, 2016, EPA announced its final ELG and promulgated the zero discharge proposal, thereby prohibiting the option of using POTWs to manage UOG wastewater.

ii. Centralized Waste Treatment Study

EPA also announced its intention to launch 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 CWT study will target offsite CWT facilities. At this time, the effort will not target onsite treatment systems at exploration and production (E&P) sites, nor will the study related to offsite facilities that do not discharge to a "water of the United States" (e.g., recycling and reuse facilities). However, the CWT study will look 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. EPA has developed its initial list of CWTs across the nation to begin to assess the magnitude of their use and continues to gather information.

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

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. Legal challenges to the Subpart OOOOa rules had to be filed by August 2, 2016.

With respect to the NESHAP rulemaking and litigation, parties to the litigation submitted motions to govern further proceedings on July 12, 2016. The NESHAP rulemaking contains unresolved issues. The first issue had been announced earlier in the process and relates to the appropriateness of using the upper protective limit to account for Maximum Achievable Control Technology (MACT) variability when EPA sets its MACT floors – which EPA did in this rulemaking. Environmental groups have challenged this approach. The other issues fall into two categories relating to either the risk assessment or the technical review. In both instances, it appears EPA is attempting to better explain and clarify what it did initially, so wholesale changes are not expected. In terms of the risk assessment, EPA intends to (1) better describe the data that was used in the risk assessment and how it was used, (2) address the adequacy of the data used in its sensitivity analysis; and (3) discuss the adequacy of the Hazardous Air Pollutants (HAPs) addressed and associated emissions points. With regard to the technical review, EPA intends to (1) discuss why/how the technologies reviewed were appropriate and reevaluate/bolster its rationale; and (2) determine if any new data or reports should be considered in its review. Further, in late 2015 and early 2016, EPA requested more information and comment on two additional issues: (1) data on storage vessels without potential flash emissions, and (2) data on HAP emissions from small glycol dehydrators. The comment period closed on March 11, 2016. Currently, the litigants are working to consolidate the remaining Subpart OOOO issues with the Subpart OOOOa litigation.

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 were a particular target, expanding into more complicated questions of state versus federal responsibilities. In addition, EPA's Enforcement attorneys have raised questions regarding whether its interpretation of the storage vessel affected facility definition differs from interpretations by the EPA regulatory development office.

b. Methane Emissions

In March 2014, President Obama issued the Climate Action Plan Strategy to Reduce Methane Emissions (CAP). President Obama has made climate change a legacy issue for his Administration. Reducing methane emissions is a key component of the President's climate change agenda. This agenda expanded in late 2015 as the Administration negotiated agreements with Canada and the Paris climate negotiations concluded. 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 VOC and methane regulations that included: (1) CAA regulatory program for new sources; (2) issuance of Control Techniques Guidelines (CTGs) for ozone non-attainment areas; (3) a new aggregation proposal; and (4) and 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.

Collectively, these new requirements and those being proposed for existing sources pose a significant and unjustified threat to American oil and natural gas production. In particular, the fugitive emissions program in Subpart OOOOa will shorten the life of new oil and natural gas wells. The suite of requirements for existing sources – whether for all operations under the nationwide proposal or the CTG requirements – puts the vast majority of these operations in jeopardy. However, all of these new requirements are unnecessary to meet the methane targets in the CAP. Those targets are achieved by Subpart OOOO. Early action in 2017 to revisit and revise these regulations is essential.

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

The President's CAP directed EPA to develop regulations of new sources of E&P emissions.

As a precursor to potential EPA regulation of methane emissions, EPA released five technical methane white papers that would underlie EPA's future decisions regarding regulation of methane. The five White Papers cover the following types of sources or activities within the oil and natural gas production sector: (1) compressors; (2) emissions from completions and ongoing production of hydraulically fractured oil wells; (3) leaks from natural gas production, processing, transmission, and storage; (4) liquids unloading; and (5) pneumatic control devices. EPA evaluated a number of options to reduce methane emissions from oil and natural gas E&P. With regard to E&P operations, EPA's NSPS would address volatile organic compounds (VOCs) and methane emissions for associated gas from hydraulically fractured oil wells, pneumatic pumps, and a leak detection and repair (LDAR) program.

In May 2016, EPA announced its final regulations under Subpart OOOOa. New oil and natural gas production regulations principally will cover 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. IPAA and other oil and natural gas trade associations and 14 states have challenged Subpart OOOOa. The litigation, *North Dakota v. EPA*, is now in the formative stages as these petitioners are developing detailed briefs. Separately, the industry has petitioned EPA for reconsideration on a number of specific sections of the regulations.

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). Subsequently, EPA reversed course and announced it would develop nationwide existing source regulations using Section 111(d).

EPA's CTG proposal includes requirements paralleling those in Subpart OOOO and OOOOa for pneumatic controllers, pneumatic pumps, compressors, storage tanks, and an LDAR program. EPA finalized these CTGs in October 2016. EPA completed this action despite its decision to develop a nationwide existing source emissions control program under CAA Section 111(d). The CTGs are redundant when the nationwide regulations are finalized and will not be implemented until after the nationwide regulation is completed.

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. Draft ICR information is subject to comment and eventually reviewed under the Paperwork Reduction Act (PRA) to assess its burden on recipients. The regulations developed under Subpart OOOO and OOOOa, as well as the proposed CTGs, have been based on spotty and frequently inaccurate information on the industry. 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 will not produce a meaningful result. EPA released the ICR on November 10, 2016 with limited changes from earlier proposals.

iii. BLM – Venting and Flaring Regulations

In addition to the EPA initiatives to regulate methane, BLM proposed regulations applying to operations on BLM controlled lands. BLM fashioned these regulations under its royalty collection authority. IPAA opposed the proposal, first, because it is an unauthorized air emission regulatory program that properly belongs to either the EPA or state regulators. Second, it is a clearly flawed approach that fails to meet its arguable objective of garnering additional federal royalties from captured gas because it actually results in reduced federal production and royalty loss well in excess of the projected captured gas royalties. Nevertheless, BLM finalized the regulations on November 15, 2016. IPAA and the Western Energy Alliance immediately initiated a challenge to the regulation in federal court.

iv. 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. Specifically, in September 2009, EPA promulgated guidance addressing the issue of CAA source determinations in the oil and gas sector. The 2009 guidance withdrew earlier EPA guidance which concluded that the three-pronged aggregation analysis for oil and gas activities focus on the proximity of surface locations. As such, under the Obama Administration EPA, emissions points could be aggregated even if they are many miles apart if EPA finds them otherwise ‘interrelated’.

In August 2012, the U.S. Court of Appeals for the Sixth Circuit clarified the definition of “adjacent” in *Summit Petroleum v. EPA*. In that case, EPA asserted that Summit's facilities met the three criteria to be classified as a major source. In a 2-1 decision, the court disagreed, focusing on the only disputed fact of whether the facilities are adjacent to one another (i.e., Criteria two). "Having determined that the word ‘adjacent’ is unambiguous, we apply no deference in our review of the EPA’s interpretation of it." In response to EPA’s argument that its liberal interpretation of “adjacent” was a long-standing policy, the court concluded that “an agency may not insulate itself from correction merely because it has not been corrected soon enough, for a longstanding error is still an error.”

Yet 14 months later, EPA corrected its error in only the most limited fashion. According to a December 2012 EPA memo, “EPA may no longer consider interrelatedness in determining adjacency...in areas under the jurisdiction of the 6th Circuit, i.e., Michigan, Ohio, Tennessee and Kentucky...Outside the 6th Circuit, at this time, the EPA does not intend to change its longstanding practice of considering interrelatedness in the EPA permitting actions in other jurisdictions.”

Industry secured a significant victory in May 2014 when the D.C. Circuit Court of Appeals struck down EPA's selective adherence to the *Summit* decision in the case of *National Environmental Development Association's Clean Air Project (NEDA/CAP) v. EPA*. In *NEDA/CAP*, the court found EPA's arguments without merit and held that EPA could not limit *Summit's* application. In August 2014, EPA announced plans to rewrite its regulatory consistency policy to "revise the Regional consistency regulations to allow an exception for judicial decisions." This appears to be a direct result of the *NEDA/CAP* decision.

Additionally, in October 2014, environmental groups announced their intention to file a petition with EPA seeking a CAA rulemaking to codify the agency's contested "adjacency" definition that is part of the test for determining whether to aggregate emissions sources for air permitting, in order to revive the strict adjacency test an appellate court scrapped in 2012. 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 would directly affect 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. 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.

v. Voluntary Program – The Methane Challenge

In addition to the 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.

Ultimately, in addition to the Obama Administration's decision to directly regulate methane, its structure for the Methane Challenge provides little incentive for production operations to participate. While a number of local distribution companies and some pipeline companies have signed up, only one producer has signed up for the percentage reduction option.

c. National Ambient Air Quality Standards

The methane regulation challenges are also compounded by EPA revision of the National Ambient Air Quality Standard (NAAQS) for ozone. Methane and VOCs are emitted from oil and natural gas production facilities at the same time from the same equipment. Consequently, reducing one also reduces the other. Because regulation of VOCs is a part of ozone nonattainment requirements, action on ozone will have an impact on methane. On October 1, 2015, EPA announced a revision to the Ozone NAAQS, reducing it to 70 parts per billion (ppb) from the current level of 75 ppb. This revision is unnecessary and will result in inappropriate restrictions on growth in newly designated nonattainment areas. EPA's analysis of the impact of the new NAAQS demonstrated that new areas designated under the 70 ppb NAAQS would comply with it using only national federal regulations. However, those areas would be subject to emissions offsets for new facilities; this is an unnecessary constraint on growth. For areas already in nonattainment, their regulations are unchanged because of the new NAAQS and EPA cannot project attainment for them for either the 70 ppb or the 75 ppb NAAQS. Consequently, there are no new health benefits, only economic losses.

Over the next few years, states will need to determine which areas fail to meet the new standard. Once final nonattainment designations are made, states will develop SIPs that will include the RACM that result from EPA's proposal. Significantly, even if the new Subpart OOOOa regulations are withdrawn, the finalized CTGs would still apply unless they are suspended.

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.

12. Greenhouse Gas (GHG) Regulation

Other EPA actions to regulate GHGs continue, as do legal actions to prevent regulations. On September 20, 2013, EPA announced its first steps to reduce carbon pollution from power plants. The standards will minimize carbon pollution by guaranteeing reliance on advanced technologies like efficient natural gas units and efficient coal units implementing partial carbon capture and storage (CCS). Much of EPA's justification of the availability of CCS relies on experience from the use of CO_2 Enhanced Oil Recovery (EOR) and thereby raises concerns that action on these regulations will adversely impact EOR use.

In June 2014, the U.S. Supreme Court decided *United Air Regulatory Group v. EPA.* The *United Air Regulatory Group* case determined whether EPA's earlier decisions to consider GHGs as pollutants under the CAA and to regulate vehicles' carbon emissions automatically triggered requirements to regulate GHGs under other air programs. EPA argued that it must include carbon dioxide in the Prevention of Significant Deterioration (PSD) pre-construction permitting program and in Title V permitting. The court held that EPA cannot require PSD or air permits based solely on a source's release of GHGs, but that emission sources that already need those permits should have to use the best available technology to control GHGs.

EPA also initiated its Clean Power Plant (CPP) regulatory program that addresses existing power plant emissions through an elaborate process of stationary source regulations and shifts in the types of energy that generate electricity. In 2015, EPA finalized the CPP, and it is now being challenged, including possible congressional action. In February 2016, the U.S. Supreme Court stayed further action on the CPP until federal litigation on it is settled. In September 2016, the D.C. Circuit Court heard arguments on the CPP. IPAA continues to follow these regulations because of their potential implications for oil and natural gas production either directly or as a possible indicator of future EPA regulatory strategies.

a. Social Cost of Carbon

Emerging as a part of the climate debate is the use of a calculated social cost of carbon in the rulemaking process. This concept was never authorized by Congress; it was created in the regulatory agencies. After a court decision drove it from a concept to a calculated value, it has become a fill-in-the-blank tool to add regulatory benefits into cost effectiveness justifications of new regulations. The history of social cost of carbon calculations is checkered and controversial – rapidly increasing as regulatory agencies have needed additional benefits to justify new requirements. For example, in the Subpart OOOOa regulations, the addition of social cost of carbon (social cost of methane) benefits lifted cost ineffective regulations – particularly for oil production facilities – to the EPA threshold for being judged cost effective. Social cost of carbon is not a sound tool for regulatory evaluation; it should be removed from regulatory evaluations.

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.

In September 2010, the Natural Resources Defense Council (NRDC) petitioned EPA to regulate oil and natural gas production wastes under Subtitle C, the hazardous wastes provision, of RCRA. EPA should abide by its long-standing position that oil and natural gas drilling fluids and produced waters do not warrant Subtitle C treatment and, as such, deny NRDC's petition.

In 1978, EPA proposed hazardous waste management standards that included stringent regulations for Subtitle C facilities, including oil and natural gas production wastes that are high volume and lower toxicity. Subsequently, in 1980, Congress enacted RCRA amendments to exempt drilling fluids, produced waters, and other wastes associated with the exploration and production of oil, natural gas, and geothermal energy from regulation under Subtitle C. The RCRA amendments also required EPA to provide a report to Congress on these wastes and to make a regulatory determination as to whether regulation of these wastes under RCRA Subtitle C was warranted.

In 1987, EPA issued a Report to Congress and, in 1988, issued a final regulatory determination finding that regulation of oil and natural gas production wastes under RCRA Subtitle C was not warranted. EPA based its findings on the fact that other state and federal programs could protect human health and the environment more efficiently, that Subtitle C was not appropriate for regulating these oil and natural gas wastes, and that application of Subtitle C to oil and natural gas production wastes would significantly harm U.S. oil and natural gas production. No evidence suggests that EPA would reach a different regulatory determination today.

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 argue 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 has little merit, EPA could be 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. Both states and industry have been denied the right to intervene in this litigation – opening the possibility for a "sue and settle" result with the environmental litigants.

However, 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.

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 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. EPA needs to confirm the existing process and reject the NRDC 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 ANPR with 54 questions aimed at updating its regulations on Risk Management, Financial Assurances and Loss Prevention.

BOEM has acted in recent years to tie up more and more company capital in bonds the government does not need or use. While there is a role for government-required bonds to assure production facilities are removed, the era of over-bonding must end.

In July 2016, BOEM issued final guidance on offshore bonding. A one-size-fits-all approach to financial assurance is unrealistic and not in the nation's best interest. This issue needs to be revisited. Furthermore, the American taxpayer has never been responsible for decommissioning in the OCS and the addition of costly over-insurance is unnecessary.

17. Well Control

On April 17, 2015, the Bureau of Safety and Environmental Enforcement (BSEE) published a 264-page NOPR regarding the requirements for Blowout Preventer Systems and Well Control. Great strides have 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. The final well control rule was issued April 13, 2016, and was implemented on July 28, 2016.

18. Offshore Air Quality Rule

On April 5, 2016, BOEM issued a proposed rule for clean air reporting and compliance. Industry submitted comments 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. Further effort is needed to improve this rule. Further input is needed to improve this rule or to scrap it altogether. The purpose of the Rule is to reduce emissions from offshore development that travel to land and recent studies have not found that offshore emissions have a noticeable impact to onshore air quality.

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. For companies paying more than $50 million to ONRR in calendar year 2013, those 45 companies 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. In the 2016 report, 41 companies with annual revenues to ONRR in calendar year 2015 of $37.5 million and above were asked to participate. Of those 41 companies, 25 participated, with the IA finding no unexplained variances between company and ONRR data. The 2016 report will be submitted to the EITI Secretariat in December. The demanding nature of EITI discourages participation particularly in the current economy. DOI should use information that it already receives to present a report on the amounts paid to the government and forego the intrusive and costly voluntary program.

20. Pipeline Safety

DOT's PHMSA has several pending significant proposed rules affecting transportation of natural gas and hazardous liquids. The most comprehensive of the proposals is the NOPR on Safety of Gas Transmission and Gathering Lines, which will come up for consideration by PHMSA's Gas Pipeline Advisory Committee (GPAC) in December 2016, with consideration by the GPAC extending into meetings in February and April 2017. The NOPR would greatly expand PHMSA's jurisdiction over gathering and would encroach on production facilities, based on the proposed definitions. Industry has commented on the proposal, 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.

Additionally, industry has submitted comments on the NOPR on Safety of Hazardous Liquid Pipelines in early January 2016. The proposed rule would extend certain reporting requirements to gravity lines and all hazardous liquid gathering lines (whether onshore, offshore, regulated, or unregulated). The draft final rule is before OMB for review.

A number of other proposed rules (e.g., operator qualifications, plastic piping) would apply to gathering, which could be significant if PHMSA succeeds in expanding its jurisdiction.

21. Financial Reform

The Securities and Exchange Commission (SEC) issued the final rule implementing Sec. 1504 of Dodd-Frank on June 27, 2016. The final rule requires an issuer of securities to disclose tax 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 and is required to file annual reports with the SEC under the Securities Exchange Act. Section 1504 applies to public companies with payments to the U.S. or a foreign government that equal or exceed $100,000. Resource extraction issuers are required to comply with the rules starting with their fiscal year ending no earlier than September 30, 2018.

22. Office of the Comptroller of the Currency

In March 2016, the Office of the Comptroller of the Currency (OCC) released a revised handbook for bank examiners related to rating bank energy lending evaluations. The application of new metrics to determine the risks of energy loans has resulted in restrictions on capital access for oil and natural gas producers. While the OCC believes its revised metrics provide greater flexibility to its bank examiners, the applications of the metrics do not appear to be consistent with that view.

23. 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. Opposition also is directed at LNG export facilities. Opposition has become so vehement that protesters have demonstrated outside the private homes of FERC commissioners. Property owners opposed to pipeline construction on their property are fighting eminent domain authority. These actions reflect a new avenue for fossil fuel opponents and serve as a harbinger of future tactics. Guidance issued by the Council on Environmental Quality (CEQ) in August 2016 "confirms that agencies should provide the public and decision makers with explanations of the basis for agency determinations" in addressing climate change in the environmental impact assessment process. Environmental groups will be relying on this "guidance" in their challenges to infrastructure development. This guidance should be withdrawn.

24. Offshore Five Year Plan

As required by the OCS Lands Act, the Obama Administration started the process to develop the next 5-Year-Plan to cover years 2017 – 2022 in June of 2014 with a request for information. A Draft Proposed Program (DPP) was released on January 29, 2015 and a second DPP was released in March 2016. The latest iteration of the DPP called for 13 potential lease sales. The Obama Administration made the decision to remove the Atlantic lease sale from the DPP in spite of hundreds of thousands of public comments in support of Atlantic area leasing. The DPP also includes a reduction of area available for lease in Alaska. In all, more than eighty percent of Federal offshore is tied up from development.

On November 18, 2016, the Department of Interior in conjunction with BOEM released the final 5-Year-Plan. The final plan further reduces the potential number of lease sales to 10 and also, in a seemingly political move, cuts drilling in the Arctic removing the Chukchi and Beaufort Seas from any lease sale. One final concern pertaining to timing is that the out-going Administration is determining the future of offshore development for the entirety of the in-coming Administration's first term.

25. Barge Transportation of Produced Water

Over the past several years, management options to handle oil and natural gas produced water have created the need for multiple options. Not all produced water can be managed at or near production operations. For example, Pennsylvania has little UIC capacity to manage its produced water. Similarly, EPA regulations on the discharge of produced water prohibit direct discharges and in 2016 prohibited discharges through pretreatment facilities related to publicly owned treatment works. Consequently, among the transportation methods that can be used to move produced water is barge transport. Permission for barge transportation rests with the U.S. Coast Guard. Despite several years of consideration, the Coast Guard has not created a uniform policy structure but retains the authority issue specific permits. However, it has failed to issue any permits despite requests.

26. SEC – Climate Related Investigations

In 2016, reports began surfacing that the SEC initiated investigations regarding how oil and natural gas companies were managing reserves valuations based on climate policy risks to future production. This type of speculative analysis without a directed purpose smacks of using federal investigative authority to threaten American oil and natural gas producers without any guidance or constraint.

27. Multicontractor Workplace

Many contractors can be subject to an Occupational Safety and Health Administration (OSHA) citation in instances where they subcontract all their work for a particular project and, with the exception of a foreman or superintendent overseeing the subcontractor's work, have no physical presence on-site. Based on OSHA's multiemployer worksite doctrine in such cases, a contractor can be cited by OSHA for violations committed by its subcontractor.

Under OSHA's multiemployer worksite doctrine, OSHA engages in a two-step process to determine whether an employer should be cited. First, OSHA determines whether the employer in question was a creating, exposing, correcting or controlling employer. If the employer falls into one of these categories, OSHA next considers whether the employer met its safety obligations. The extent of the actions required of employers to meet their obligations varies based on which category applies.

Clearly, this expansive view of workplace control can expose companies with limited involvement in actual workplace safety to citations and fines. The policy should be withdrawn, reconsidered and revised.

28. Severe Violator Enforcement Program

OSHA recently continued to intensify its focus on the upstream oil and gas industry by adding oil and gas production sites to its Severe Violator Enforcement Program (SVEP). Inclusion in the SVEP will likely result in more inspections, more severe fines and settlement terms, and the increased costs and delays that arise when an industry is placed under the government's microscope.

OSHA's SVEP is designed to concentrate OSHA resources on employers who have "demonstrated indifference to their OSH Act obligations" through willful, repeated, or failure-to-abate violations, and replaces the Enhanced Enforcement Program. The program focuses on violations related to fatalities, so-called "High-Emphasis Hazards" like crystalline silica exposure, potential releases of highly hazardous chemicals, and other egregious actions. Enforcement tools in the SVEP include mandatory follow-up inspections at the impacted "facility," increased company-wide inspections and scrutiny irrespective of the safety record or proximity of the other facilities or business units, and "media shaming" through news releases and posting of Citations and Notifications of Penalty.

Importantly, OSHA can, and does, bring these punitive tools to bear even before the final disposition of the underlying violation. In doing so, OSHA is frequently able to leverage corporate-wide agreements that can include harsh monetary concessions or operational changes like drafting or rewriting comprehensive safety and

health programs. OSHA clearly recognizes that a company's inclusion in the SVEP creates significant burdens and unwelcome notoriety, and uses its authority to remove the company from the SVEP to leverage powerful concessions from the company.

OSHA justifies this somewhat unprecedented scrutiny on "[the] industry's significant worker fatality rate over time." According to OSHA, "[o]ver the last twenty years, upstream operations have experienced a fatality rate that has ranged from five to eight times greater than the national average for all U.S. industries." Frustratingly, while this statistic is frequently cited, it entirely mischaracterizes the nature of occupational health and safety in the oil and gas industry. The more accurate figures are the Bureau of Labor Statistics' illness and injury rates, which for the oil and gas extraction industry show an incidence rate of nonfatal occupational injuries and illnesses of 1.3 per 100 full-time workers—which is lower than the overall rate of 3.5 and lower still than most other natural resources, construction, and manufacturing industries.

Notwithstanding this lack of justification, the increased focus on oil and gas is confirmed by OSHA's fiscal year 2014 inspection data that, while showing an overall decrease in inspections, exhibited an increase in the mining, quarrying, and oil and gas extraction sector of 2.6% – 713 inspections, up from 695 inspections in the 2013 fiscal year. OSHA has explained that this increase is due to responding to complaints and local emphasis programs.

The recent inclusion in the SVEP is just the latest in the long line of increased scrutiny of the oil and gas industry. The policy should be withdrawn and reconsidered.

29. Endangered Species Litigation

Listing decisions – overwhelmingly driven by litigation that defines the agenda for the FWS – should include participation from all affected parties, not just those trying to force unrealistic decision schedules on the agency. Following are several specific species issues that illustrate the complexity of the decision making process and the use of litigation to drive it.

a. Monarch Butterfly – Center for Biological Diversity Lawsuit

In December 2014, the U.S. Fish and Wildlife Service announced it would be conducting a status review of the monarch butterfly. The announcement followed an August 2014 petition from the Center for Biological Diversity, the Center for Food Safety, the Xerces Society to list the butterfly under the ESA.

In February 2015, FWS announced $3.2 million to help the monarch butterfly, with $2 million going towards the restoration of 200,000 acres of habitat and the rest being used to start a conservation fund.

In March 2015, industry submitted comments to FWS in response to a request for comment on the status of the monarch butterfly, highlighting the negligible impact of oil and gas operations on the species.

On January 5, 2016, the Center for Biological Diversity and Center for Food Safety threatened to sue Fish and Wildlife because the agency had exceeded the scientific review period required by law for a 12-month finding.

On July 5, 2016, the Service announced an agreement with the Center for Biological Diversity and Center for Food Safety, requiring the agency to propose protection for the monarch, deny protection or assign it to the "candidate" waiting list for protection by June 30, 2019.

In October 2016, the Center for Biological Diversity also sued the U.S. Environmental Protection Agency regarding the impacts of a pesticide on the butterfly.

b. Lesser Prairie Chicken – "Emergency" Petition to list Distinct Population Segments

In September 2016, WildEarth Guardians, Defenders of Wildlife, and the Center for Biological Diversity petitioned the Fish and Wildlife Service to list three Distinct Population Segments (DPS) of lesser prairie chicken: the Shinnery Oak Prairie DPS, the Sand Sagebrush Prairie DPS, and the Mixed-Grass Prairie and Shortgrass Prairie/CRP Mosaic DPS.

The groups called for critical habitat designations and emergency endangered listing for the Shinnery Oak Prairie and Sand Sagebrush Prairie DPSs.

FWS spokesman Leslie Gray said that the service is conducting an in-depth assessment of the bird to determine whether it should be placed back on the threatened or endangered species list.

c. Sage Grouse Resource Management Plans

In September 2015, Fish and Wildlife announced the greater sage-grouse did not warrant federal protection under the Endangered Species Act. The Service simultaneously announced federal land use plans to govern land use activities on millions of acres of federally managed sagebrush habitat in the West.

In September 2015, the Service, through the Bureau of Land Management, released its Record of Decision (ROD) and Approved Resource Management Plan Amendments (ARMPA's) for the Great Basin Region Greater Sage Grouse Sub-regions (Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah).

According to BLM, "the ARMPAs include GRSG habitat management direction that avoids and minimizes additional disturbance in GRSG habitat management areas. Moreover, they target restoration of and improvements to the most important areas of habitat. Management under the ARMPAs is directed through land use allocations that apply to GRSG habitat."

The BLM is also currently seeking comment on the Gunnison Sage-Grouse Rangewide Draft Resource Management Plan Amendment and Draft Environmental Impact Statement.

d. Northern Long-Eared Bat 4(d) Rule

In April 2015, the Obama Administration announced its intent to list the northern long-eared bat as threatened under the Endangered Species Act – a decision that would impact 37 states and the nation's capital.

In March 2015 comments, industry specifically requested that all oil and gas development activities be exempted from the prohibition against incidental take of the bat through the proposed special rule. In July 2015, industry again urged the Fish and Wildlife Service to amend the Interim 4(d) Rule for the northern long-eared bat to reflect the fact that oil and gas development activities do not pose a significant threat to the existence of the bat.

In January, 2016, Fish and Wildlife published its Final 4(d) Rule on the northern long-eared bat in the Federal Register. In regard to the oil and natural gas industry, Fish and Wildlife states "take of northern long-eared bats attributable to habitat conversion and habitat loss is not prohibited under this final 4(d) rule, provided that developers and project proponents follow conservation measures described herein when activities occur within the WNS zone."

According to Fish and Wildlife, the Final 4(d) Rule:

> Prohibits purposeful take of northern long-eared bats throughout the species' range, except in instances of removal of northern long-eared bats from human structures, defense of human life (including public health monitoring), removal of hazardous trees for protection of human life and property, and authorized capture and handling of northern long-eared bats by individuals permitted to conduct these same activities for other bats until May 3, 2016.
>
> Incidental take resulting from otherwise lawful activities will not be prohibited in areas not yet affected by white-nose syndrome.
>
> Take of northern long-eared bats in their hibernacula is prohibited in areas affected by WNS, unless permitted under section 10(a)(1)(A) of the Act.
>
> Incidental take resulting from tree removal is prohibited if it: (1) Occurs within a 0.25 mile (0.4 kilometer) radius of known northern long-eared bat hibernacula; or (2) cuts or destroys known

occupied maternity roost trees, or any other trees within a 150-foot (45-meter) radius from the known maternity tree during the pup season (June 1 through July 31).

Incidental take of northern long-eared bats as a result of the removal of hazardous trees for the protection of human life and property is also not prohibited.

30. Limits on Subsurface Uses of Hazard Mitigation Assistance Acquired Lands

In 2014, the Federal Emergency Management Agency (FEMA) initiated a policy to prohibit hydraulic fracturing for resources underlying land FEMA acquires. Because the purpose for FEMA land acquisition in these instances is intended to prevent redevelopment of the land that would result in future damage and additional FEMA financial exposure, FEMA has extended its development limitation without justification. FEMA created a mitigation policy that unnecessarily prohibits oil and natural gas development using hydraulic fracturing. Oil and natural gas development using the advanced technologies of horizontal drilling and hydraulic fracturing do not pose a redevelopment risk to a FEMA owned asset. The policy results in lost energy development and royalties. FEMA should withdraw this mitigation policy (FP 302-405-146-1).

31. Hedging

Several rulemakings pending before the Commodity Futures Trading Commission (CFTC) could impact energy companies' hedging programs. In implementing provisions of Dodd-Frank, the CFTC has proposed rules that would govern position limits, including aggregate limits and the definition of bona fide hedging. Pending a final rule, the CFTC extended the de minimis exception for swap dealers through 2019. Under CFTC rules, market participants who exceed $8 billion in gross notional swap dealing activity over a twelve-month period are required to register with the Commission as swap dealers during the phase-in period currently in effect. Without this extension, the phase-in period is scheduled to end and the threshold would have fallen to $3 billion in December 2017. The Federal Reserve Board of Governors issued a proposed rule, "Risk-based Capital and Other Regulatory Requirements for Activities of Financial Holding Companies Related to Physical Commodities and Risk-based Capital Requirements for Merchant Banking Investments." In this proposed rule, the Board seeks comments, due December 22, 2016, on the adoption of additional limitations on physical commodity trading by financial holding companies. The proposed rule would increase transparency regarding physical commodity activities of financial holding companies through more comprehensive regulatory reporting. While not a direct regulation of energy companies, the proposed rule would restrict the activities of bank holding companies as trading partners.