**Kevin O'Scannlain**
Vice President, Upstream Policy

www.api.org

April 15, 2021

U.S. Department of the Interior
Office of the Secretary
1849 C Street NW
Washington, DC 20240

Re: API comments of DOI review of the federal oil and natural gas program

*Submitted via email - energyreview@ios.doi.gov*

Dear Secretary Haaland:

The American Petroleum Institute (API) is a national trade association representing nearly 600 member companies that operate throughout the United States and are involved in all aspects of the oil and natural gas industry, including exploration, development, production, transportation, refining, and marketing. Many of our members operate on federal lands onshore and on the Outer Continental Shelf (OCS). For many years, API has worked collaboratively with the Department of the Interior (DOI) and its agencies to help ensure the continued safety of industry workers and protection of the environment both onshore and offshore. These comments are provided in addition to those filed as part of the statement by API Senior Vice President Frank Macchiarola during the March 25, 2021 virtual forum.

API appreciates the opportunity to provide comments to inform DOI's review of the federal oil and natural gas program. We also offer our expertise to serve as a resource and collaborate with DOI as the department carries out this review. The U.S. is now the global leader in both emissions reductions and energy production, thanks to the innovation and vitality of the U.S. oil and natural gas industry. We believe it is critically important to bring proper attention to the enormous benefits derived from continued oil and natural gas exploration and development on federal lands and waters – both for our economy and our environment. It is just as critical that we highlight that a ban or significant curtailment of new oil and natural gas leasing would effectively reduce our domestic energy supply and will not reduce demand. To the contrary, enacting these policies only means that we and others will likely import more oil and natural gas from countries with lower environmental standards and

could revert to coal for power generation[1], resulting in higher emissions domestically, precisely the opposite of the Administration's intended effect.

As an initial matter, the scope of DOI's request for information by April 15 and intended "interim report" this summer is unclear. The comment period was not accompanied by any Federal Register notice, scoping document, or other guidance. While Section 204 of Executive Order 14008 speaks to a pause on new federal leasing pending a review of "oil and gas permitting and leasing practices," remarks at the March 25 forum covered a broader range of issues. In an abundance of caution, these comments also address this broader range of issues. However, API is concerned that this review could morph into a free-ranging and unmanageable process that continues interminably. DOI should be mindful of this as the review progresses and ensure that any identified changes are made using required rulemaking processes under the Administrative Procedure Act. Oil and gas activities should also be permitted to continue pending deliberations of the details of any such regulatory efforts.

## I. Shared Goals – Addressing a Lower Carbon Future While Maintaining U.S. Energy Production

The oil and natural gas industry shares the Administration's goals of achieving economy-wide emissions reductions, while maintaining our global energy leadership and providing affordable, reliable energy to the American people. We are eager to partner with this Administration to develop workable climate solutions, and API's *Climate Action Framework*[2] ("CAF" or "Framework") works to accelerate this progress. The Framework represents our industry's commitment to lead the way on producing cleaner energy and lowering greenhouse gas emissions consistent with the goals of the Paris Agreement. We believe we can achieve both by working together with government and other stakeholders.

The oil and natural gas industry produces and delivers nearly 70% of the energy our country uses.[3] Our nation and the world will continue to need reliable, affordable energy for public health, economic growth, and as the foundation for broader opportunities for decades to come.[4] The Framework recognizes that the world's energy needs must be met with actions that also meaningfully address the risks of climate change. Our industry can further reduce emissions throughout the energy value chain through advanced technologies and common-sense regulations – consistent with our record of innovating to address some of the world's greatest challenges.

API and its members support climate actions in the following five areas:

---

[1] On Location, Executive Summary, https://www.api.org/~/media/Files/News/2020/09/Consequences_of_a_Leasing_and_Development_Ban_on_Federal_Lands_and_Waters.pdf

[2] API, "*Climate Action Framework*" https://www.api.org/climate

[3] https://www.eia.gov/totalenergy/data/monthly/pdf/sec1_7.pdf

[4] https://www.iea.org/reports/world-energy-model/sustainable-development-scenario

1. *Accelerate Technology and Innovation* to reduce emissions while meeting growing energy needs.
2. *Further Mitigate Emissions from Operations* to accelerate environmental progress.
3. *Endorse a Carbon Price Policy* to drive economy-wide, market-based solutions.
4. *Advance Cleaner Fuels* to provide lower-carbon choices for consumers.
5. *Drive Climate Reporting* to provide consistency and transparency.

The Framework details API's endorsement of a government carbon price policy that applies to all sectors of the economy and is market-based and transparent. It also calls for accelerating technologies and innovations that will be key to meeting the challenge of a lower-carbon future. Specifically, the Framework calls for federal funding for low-carbon research, development, and deployment, including carbon capture, utilization, and storage (CCUS) and hydrogen technology.

The Framework also specifies multiple actions to address climate change by further mitigating emissions from operations, including API's support for the direct regulation of methane from new and existing sources.[5] We believe we can build on progress already made in lowering methane emissions rates from oil and natural gas production[6] while industry continues to provide needed energy to meet U.S. and world demand.

API agrees that these shared goals should not be met without addressing outstanding environmental justice issues or by creating new societal burdens for communities and workers as we seek to meet the demand for affordable, reliable, and cleaner energy and have a positive impact on the communities in which we operate. The oil and natural gas industry is essential to supporting a modern standard of living for all by ensuring that communities have access to affordable, reliable, and cleaner energy. API's top priority remains public health and safety, and our member companies have well-established policies in place for proactive community engagement[7] and feedback aimed at fostering a culture of trust, inclusivity, and transparency. We believe that all people should be treated fairly, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Several federal agencies and departments have initiatives to address environmental justice; DOI should collaborate within the federal family as it addresses this issue. In the meantime, API supports the following environmental justice principles:

- Increased racial, national origin and socioeconomic diversity of all stakeholders involved in the environmental policy development process.

[5] https://www.api.org/news-policy-and-issues/methane

[6] EPA and EIA data show that emissions per unit of production from key U.S. producing basins fell nearly 70% between 2011 and 2019. https://www.epa.gov/ghgreporting/ghg-reporting-program-data-sets; https://www.eia.gov/petroleum/drilling/

[7] ANSI/API BUL 100-3 1ST ED (2014) Community Engagement Guidelines; https://www.apiwebstore.org/publications/item.cgi?08980f40-f946-4322-a98f-37976a9cd841

- Development of enhanced risk communication tools and increased usage of those tools to inform businesses and communities on how to manage and/or reduce risks in operation areas.
- Development and application of the best and publicly available scientific methods to define the relationship between chemical stressors, non-chemical stressors, and social determinants of health.
- Use of community monitoring as a tool to better understand sources of emissions and potential impacts and mitigation measures.
- The development of improved decision-making tools.

We also believe that environmental justice is supported by balancing economic benefits that have helped fuel growth and prosperity, and common-sense regulations to manage potential environmental and health related risks. This is particularly true for the Gulf Coast states, for instance, where a recent ICF study[8] concluded that,

> "Louisiana's economy receives significant contributions from oil and gas industry activity in the state. State GDP is heavily influenced by oil and gas industry generated income, and the industry supports approximately one out of every nine of the state's jobs, many of which provide annual wages which are significantly above the state average. Oil and gas activity also supports Louisiana residents and businesses through indirect and induced economic impacts, further reinforcing the importance of the industry to the state's economy."

The same is true for many Western states. Development on Federal lands promotes investment into rural areas where State and local economies depend on drilling and development for jobs, continued economic prosperity and revenue generated from state severance tax and other local taxes generated from such projects. According to a recent University of Wyoming study[9], "a moratorium on new leases for oil and gas development on federal lands or a drilling ban would significantly reduce oil and tax revenues and economic growth" in Western states including Alaska. As New Mexico Governor Michelle Lujan Grisham confirmed in a recent letter[10] to DOI, "…an extended and indefinite suspension would have significant impacts on our workforce and state funding for education and creates unnecessary uncertainty for New Mexico's state and local tax revenues."

## II. Industry Economic Benefits and the Adverse Impacts of a Leasing and Development Ban

[8] https://www.lmoga.com/assets/uploads/documents/LMOGA-ICF-Louisiana-Economic-Impact-Report-10.2020.pdf
[9] https://www.wyoenergy.org/wp-content/uploads/2020/12/Final-Report-Federal-Leasing-Drilling-Ban-Policies-121420.pdf
[10] https://www.heinrich.senate.gov/press-releases/heinrich-lujan-welcome-department-of-interiors-decision-to-return-to-standard-permitting-process-for-activities-on-public-lands-including-energy-development

A comprehensive review of federal oil and natural gas leasing and development would be incomplete if it fails to recognize the significant benefits derived from the activity. President Biden took office at a time when the United States leads the world both in energy production[11] and environmental performance. [12] The Biden administration inherited a strong American energy outlook, reflected in low household energy costs,[13] record greenhouse gas emissions reductions[14] and reduced reliance on foreign energy.[15] Recent statements that "the federal oil and gas program is not serving the public well" do not provide a balanced assessment of the program's overall track record, or importance to the nation. Oil and natural gas development on federal lands and waters provides affordable and reliable energy and remains essential to America's post-pandemic recovery and long-term economic growth. While API agrees that a review of the program is warranted, and there should be several mutually agreeable policy revisions, it remains clear that federal oil and natural gas production provides a broad range of net benefits to the American people and should not be summarily dismissed or minimized.

For example, oil and natural gas exploration and production activities on federal lands and waters support hundreds of thousands of good paying jobs[16] and local economies[17], and are conducted under some of the most stringent safety and environmental regulations in the world. These activities also contribute billions of dollars to federal and state governments every year, which support important programs like education, infrastructure, and conservation efforts. In 2019 alone, DOI disbursed nearly $12 billion generated from energy production on federal lands and waters to the U.S. Treasury and state governments.[18] In 2020, the Land and Water Conservation Fund, which is funded almost entirely by offshore oil and gas natural revenues, distributed over $227 million across the country for outdoor recreation and conservation efforts.[19] DOI recently announced that offshore oil and gas production provided $249 million in FY2020 revenues for conservation, restoration and hurricane protection programs to Gulf states. And just earlier this month DOI announced $1.6 billion in funding to

---

[11] U.S. Energy Information Administration, *"U.S. Energy Facts Explained"* https://www.eia.gov/energyexplained/us-energy-facts/

[12] U.N. Climate Change "GHG data from UNFCCC" (CO2 Total w/o LULUCF 2000-2018) https://unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc

[13] "Consumer Expenditures--2019." U.S. Bureau of Labor Statistics, September 9, 2020. https://www.bls.gov/news.release/cesan.nr0.htm

[14] U.S. Environmental Protection Agency, "Inventory of U.S. Greenhouse Gas Emissions and Sinks 2019" https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

[15] U.S. Energy Information Administration, "U.S. Energy Facts Explained" https://www.eia.gov/energyexplained/us-energy-facts/

[16] National Ocean Industries Association. "*The Economic Impacts of the Gulf of Mexico Oil and Natural Gas Industry*" https://www.noia.org/gulfimpact2020/ 2020.

[17] Considine, Timothy J, "*The Fiscal and Economic Impacts of Federal Onshore Oil & Gas Lease Moratorium and Drilling Ban Policies*" https://www.wyoenergy.org/wp-content/uploads/2020/12/Final-Report-Federal-Leasing-Drilling-Ban-Policies-121420.pdf December 14, 2020.

[18] U.S. Department of the Interior, "Natural Resources Revenue Data" https://revenuedata.doi.gov/query-data/?dataType=Disbursements

[19] U.S. Department of the Interior, "*Secretary Bernhardt Announces $227 Million for State Outdoor Recreation and Conservation Projects"* March 31, 2020.

address critical deferred maintenance projects and improve transportation and recreation infrastructure in national parks, national wildlife refuges and recreation areas, and at Bureau of Indian Education schools. This funding, through the Great American Outdoors Act, would not exist but for energy development on federal lands and water.

The ability of U.S. producers to provide oil and natural gas supplies to the world market has also changed geopolitical dynamics for the better, resulting in greater energy security for the U.S. and its allies, in addition to global environmental benefits. U.S. LNG exports will be critical to achieving the ambitions of the Paris Agreement – Models show that this important agreement cannot be achieved without access to natural gas that provides a path to transition countries toward a lower-carbon future while ensuring millions of people in developing nations gain and keep access to electricity. As the Paris Agreement recognizes, addressing energy poverty should be done in parallel with reducing emissions, and reducing U.S. LNG exports is inconsistent with these goals.

Policies aimed at slowing or stopping oil and natural gas production on federal lands and waters will ultimately prove harmful to our national security, environmental progress, and economic strength. National energy demand will continue to rise[20] and it is imperative that, as much as possible, the energy we use comes from right here in the United States. Analysis prepared by OnLocation, an energy analytics firm, a ban on new Federal leasing for 8 years would result in a decline of 1.7 MMBOE/D of oil production and an elimination of nearly 340,000 American jobs by 2030.[21,22] Banning leasing and development on federal lands and waters, or greatly hindering the ability to lease, permit, and/or develop these areas causing a de facto ban, would threaten decades of American energy and climate progress and return us to greater reliance on foreign energy with lower environmental standards. Perhaps most pointedly, any forced decrease in domestic production of natural gas will lead to higher GHG emissions – *precisely the opposite effect of the administration's intended goal*.

## III. Industry Reliance on a Stable Leasing and Lease Management Regime in the U.S. is Threatened by a Legally Suspect Leasing Ban

In the more than 100 years since Congress enacted the Mineral Leasing Act (MLA), and the nearly 70 years since the Outer Continental Shelf Lands Act (OCSLA) was adopted, API's members have confidently invested hundreds of billions of dollars to develop oil and gas resources on federally managed lands in reliance on a legally sound and stable leasing and lease management regime governed by those statutes. These companies have expended these considerable financial and time resources at substantial economic risk posed by high capital

[20] U.S. Energy Information Administration, "*Annual Energy Outlook 2021*" https://www.eia.gov/pressroom/presentations/AEO2021_Release_Presentation.pdf February 3, 2021.
[21] OnLocation Inc., "The Consequences of a New Leasing Ban on Federal Lands and Waters," Publication forthcoming.
[22] OnLocation,Inc., "*The Consequences of a Leasing and Development Ban on Federal Lands and Waters*" https://www.api.org/~/media/Files/News/2020/09/Consequences_of_a_Leasing_and_Development_Ban_on_Federal_Lands_and_Waters.pdf September 2020.

costs and leases' uncertain production potential. Any extended leasing ban would threaten that stability and industry's confidence in DOI's management of federal mineral resources.

The MLA directs DOI to hold quarterly lease sales in each Bureau of Land Management (BLM) state office. OCSLA in turn requires development of a Five-Year Program with comprehensive opportunities for environmental review and input from coastal states in establishing a schedule for lease sales, as well as prior to leasing and development approvals. The current Five-Year Program has lease sales scheduled through 2022. DOI recently cancelled several BLM quarterly lease sales and two OCS lease sales under the current Five-Year Program. Cancelling these and future required lease sales while DOI is considering a revised regime for federal mineral leasing contravenes the agency's statutory responsibilities. Lawsuits challenging implementation of a de facto leasing ban and the cursory and sudden cancellation of lease sales already have been filed in federal district courts in Wyoming and Louisiana.

API supports DOI's efforts to consider modifications to federal mineral leasing with full opportunity for public engagement. The issues are complex, and a multi-year rulemaking effort likely will ensue. However, any ban on statutorily-required lease sales in the interim is not legally permissible and upends the decades of stability and industry confidence in the DOI leasing program that has warranted the oil and gas industry's significant financial investment in that process.

## IV. The U.S. Fiscal System and its Competitiveness both Globally and Domestically

U.S oil and natural gas production on federally managed lands and waters provides many benefits for the U.S., including billions of dollars in capital investments, creation of thousands upon thousands of well-paying jobs, continued improvement in our balance of trade, and increased energy security for the U.S. and our allies abroad. It also provides significant, important revenues to federal and state governments in the form of royalties, rents, bonus bids and taxes. Over the past decade, DOI has disbursed on average $10 billion dollars annually from energy production on federal lands and waters to the U.S. and state governments.[23]

To maintain these benefits, DOI policy decisions must balance many factors, including setting royalty rates and other revenue producing charges at levels that will continue to attract the investments needed to produce domestic oil and natural gas on federal lands and waters. The competitiveness of investments in U.S energy exploration and development depends upon many factors such as:

- Cost of exploration and development;
- Prospectivity and the scale of the resource base;
- Fiscal terms; and
- Other regulatory and above-ground risk factors.

[23] https://revenuedata.doi.gov/query-data

Government policies underpinning the fiscal system need to ensure that they are aimed at attracting new investment and remain competitive with opportunities in other countries as well as on state, private and Indian lands, which geologically may have more attractive development targets and flexible contract terms. Certain other countries often do not provide the robust environmental safeguards required in the U.S.

Royalties are only one of many benefits the U.S. realizes through federal energy development. U.S. federal energy development also provides revenue directly to the U.S. Treasury in the form of rental payments, bonuses, and taxes. Together, these various payments constitute the government's share of revenues from production from federal leases that is often referred to as "government take". Contemplation of policy changes should include a robust consideration of the fiscal system impacts as a whole. As recognized in the BOEM-funded IHS CERA Study[24] *Comparative Assessment of the Federal Oil and Gas Fiscal System*, bonus bid payments to secure leases through competitive tender also constitute an important component of the income accruing to governments under such a system. The IHS CERA study noted that relative to other fiscal systems, the current federal oil and natural gas system relies more heavily on front-ended bonus bids which "provide no guarantee that the lessee will be able to discover oil and gas in paying quantities effectively shifting the risk of exploration onto the oil companies." Bonuses create a self-correcting mechanism within the overall fiscal system – lease and project economics are evaluated based on the combination of the upfront bonus cost and the royalty rate. An increase in royalties on top of the bonus structure could reduce bonus payments or potentially drive away investment from federal lands and waters. As the IHS CERA Study found, government take should not be the only measure to determine attractiveness of a fiscal system:

> "If [government take] is used at all, it should be combined with other measures of profitability, fiscal system flexibility, revenue risk, and fiscal stability in order to properly assess petroleum fiscal systems. Such analysis should be combined with a proper understanding of the resource potential and the relative prospectivity of the federal lands. Fiscal design should be a reflection of the jurisdiction's relative prospectivity, economic development needs, dependence on hydrocarbon revenues, and environmental protection policies."[25]

This is particularly true for offshore production. A more recent 2018 IHS study[26] also commissioned by DOI showed that much of the U.S. Gulf of Mexico (GOM) oil potential is in the Lower Tertiary, with total vertical depth greater than 20,000 feet, High Pressure High Temperature (HPHT) reservoirs, with lower well productivity, and substantially higher than average exploration and development costs as compared to Brazil and Guyana. It also concluded that although passage of the Tax Cuts and Jobs Act in December 2017 has increased

[24] https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/Energy-Economics/Fair-Market-Value/CERA-Final-Report-November-2011.pdf
[25] https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/Energy-Economics/Fair-Market-Value/CERA-Final-Report-November-2011.pdf, p. 28
[26] https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/Energy-Economics/Fair-Market-Value/2018-GOM-International-Comparison.pdf

the competitiveness of the U.S. fiscal system for the U.S. GOM, IHS found that the U.S. offshore oil fields ranked poorly in terms of Internal Rate or Return (IRR) within the offshore peer group, below all countries except Canada. An increase in royalty rates may alter this ranking and make U.S federal lands even less competitive. The development of U.S. deepwater oil resources is especially challenged under the base and low oil price scenario. This is likely due to upfront costs and the reliance on royalties as opposed to profit sharing.

Onshore, any potential changes to the fiscal system should also recognize the higher regulatory burden for companies to develop on federal lands versus non-federal lands, as well as the significant differences between these regimes. Leasing and operating on federal lands is more complex than leasing and operating on fee or state acreage. Added to this complexity, compliance with Office of Natural Resources Revenue ("ONRR") valuation and reporting requirements has also historically been complicated and cumbersome to the point of proportionately over burdening the industry when compared to State or Individually owned lands.[27] There are also differences between the post-production costs that companies and lessors share depending on where the resource is located. Increasing federal onshore royalty rates may further disadvantage federal leases when compared to state or private leases due to the additional cost and time of securing permits to carry out operations on federal leases, coupled with costs for compliance with other federal regulations that do not apply to operations on leases of state- and privately-owned mineral estates. Just as the New Mexico Secretary of Energy, Minerals and Natural Resources acknowledged in a February letter to DOI that rigs moved from BLM lands in NM to private lands in TX following the permitting uncertainty created by Secretarial Order 3395, DOI should consider and account for potential unintended consequences that changes to royalty policy may result.

API and its members believe that if changes to royalty rates are pursued after a comprehensive review, they should be considered both in relation to other benefits provided through energy development as well as in relation to the U.S. fiscal system in its entirety. These prospective changes could only apply to future new leases given existing contractual lease terms that are not legally subject to alteration. Any royalty rate changes should also be appropriately tailored to the unique parameters of the production (e.g., onshore vs. offshore, well depth and productivity, gas versus oil, conventional versus unconventional, water depth, frontier basins, etc.) in order to properly account for project economics and avoid creating arbitrary barriers to development. This recommended approach is particularly critical for offshore investments. Economic evaluations associated with offshore developments are highly sensitive to royalty rate inputs. Each field has its own economic drivers and sensitivities and a change in royalty rates will affect each lease differently.

[27] API members strongly believe that the *2020 Valuation Reform and Civil Penalty Rule* (RIN 1012-AA27) addresses many of these concerns. The Rule provides simplicity, certainty (particularly early certainty), clarity, and consistency in valuation methods and decrease both industry's and the government's costs of compliance. As stated in a prior comment effort, we strongly urge the Department to make this Rule effective as quickly as possible. We also encourage the Department to consult API's November 9, 2020 comments on the BLM Oil and Gas Site Security, Oil Measurement, and Gas Measurement Regulation revisions, and work to finalize these revisions which address conflicts and inconsistencies with measurement and commingling regulations before making changes to royalty rates.

API and its members support significant actions to address climate change, and its above-discussed Framework calls for specific industry and government actions to further reduce emissions, including the endorsement of a carbon price policy, while meeting the world's long-term energy needs. However, royalty rates are not a permissible, appropriate, nor transparent place to address the costs associated with climate change. Climate change policy decisions are addressed by multiple Department bureaus and offices with the specific legal mandate to evaluate environmental impacts and conduct the appropriate National Environmental Policy Act (NEPA) analysis. These policy decisions are also addressed within the statutory authority of other agencies like the Environmental Protection Agency. A royalty rate increase tied to climate costs may not provide a transparent incentive to reduce GHG emissions efficiently. Inflating royalty rates for the purpose of economically disincentivizing production would be both unlawful and unwise. Rather, royalty rates should be based on fair market value as statutorily mandated by the Outer Continental Shelf Lands Act and the Mineral Leasing Act.

## V. "Stockpiling" of Leases and Permits

There has been criticism of industry for supposedly "stockpiling" federal leases and permits, but this criticism is based upon a misunderstanding of lease operations. Current leasehold policies are appropriate in their existing form. Market forces serve to regulate the number of leases a company chooses to hold. Not every lease contains resources in commercial quantities, nor does every non-producing lease represent a potential discovery. Oil and natural gas resources exist on only a small number of leases and are economic to produce on an even smaller number.

All non-producing leases are, in reality, active. Industry takes the risk to invest in and acquires new leases understanding that they will not be productive immediately, and some possibly not ever. It takes several years of due diligence, and a sizable investment, for a company to analyze the underlying geology, perform the necessary technology and engineering assessments, finalize commercial arrangements, and coordinate the logistics of exploration and development projects before a company can determine if a lease contains commercial quantities of oil and natural gas.[28] Nonetheless, even on non-producing leases, the U.S. benefits significantly by receiving substantial upfront payments from lease sale bonuses and annual rentals which are owed just for the opportunity to acquire a federal mineral lease with rights to explore for oil and natural gas, notwithstanding any additional fees and regulatory requirements that must be addressed to actually proceed with exploration and/or development activities on the lands. Further, when a leasehold proves to be unproductive, the lease is returned to the government at the end of the term or relinquished earlier if a company has completed enough work to understand the subsurface to determine there is low value in continuing to pay rentals on the lease without the potential of being able to produce affordable energy from the lease to help meet our national and global energy needs. In these instances, all monies collected by the U.S. Treasury in the form of bonus bids, rentals and any other

[28] White, Dylan, *"Life Cycle of an Oil Well"* https://bellatorum.com/life-cycle-of-an-oil-well/ (March 22,2021).

permitting fees collected while the lease was held are kept for the public and the lease can be offered at a future sale for the government to collect additional revenues if a different company sees other potential in the lease or when new technologies become available that garners renewed interest in the lease.

Onshore, all lease and permitting activity takes place within the confines and required timeframes of regulatory policies. These activities often take place on leased federal acreage that remains open to "multiple uses" such as recreation, livestock grazing, camping, potash mining, fishing, transportation, and more. There is no guarantee that all leases will eventually be productive. In fact, the total number of federal leases in effect onshore has declined every year since 2009, at an average rate of over 6% each year.[29] As federal permits are expensive to obtain and can take up to a year to get approval, operators need to submit applications up to 18 months in advance of the rig schedule. As operators develop federal resources their plans often change as they learn from new well completions, which requires new permits for the same development areas. Also, some local BLM offices ask operators to submit speculative APDs on multi-well drilling pads so they can more efficiently do collective environmental reviews even though some of these wells are two to four years out on an operator's development schedule, which can create the illusion of abundant permits. Even so, with roughly 63% of onshore leases producing, producing acreage is near an all-time high while federal onshore leased acreage is near its lowest point in two decades resulting in less than 4% of the federal mineral estate being leased.[30] This data point validates the existing structure is effective and there is no rampant "stockpiling" of leases.

While offshore leasing decisions share similar challenges and considerations with onshore, the operating environment, regulatory framework, and agency policies and practices result in companies managing their leasing and permitting practices differently. For example, Rental fees on offshore leases can now exceed $100,000 annually and increase in the later years of the lease to encourage diligent development. Also, the unique operating conditions offshore mean that companies rarely "sit" on approved permits to drill – of the current "stockpile" of drilling permits less than one percent are held by offshore operators. One common area between the onshore and offshore is the fact that the lands and waters under lease are still, in most cases, available for "multiple uses." DOI needs to recognize the differences between the two regimes and avoid making changes leading to unintended consequences.

## VI. Industry Standards, Best Practices, and Collaborative Safety and Environmental Initiatives

[29] U.S. Department of the Interior, "Oil and Gas Statistics" (Table 1, Table 3) https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics

[30] U.S. Department of the Interior, "Oil and Gas Statistics" (Table 1, Table 5) https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics

Since 1924, API has led in the establishment, maintenance, and dissemination of hundreds of standards to ensure the safe and sustainable development of oil and natural gas in the U.S. and across the world. The process to create and manage the standards has been accredited by the American National Standards Institute ("ANSI"), the body that accredits similar programs at several U.S. national laboratories. This method brings together academics, government regulators, and industry experts to improve and advance the safety of energy development. Each standard is reviewed at least every five years to maintain its integrity. API's standards represent industry safety practices based on the best available science and research. This is one reason they are widely cited, and often incorporated, in federal and state regulations. International regulators often reference the standards in their country's regulations, as well. As these standards are implemented and their effects measured, they add to the body of knowledge of industry best practices and lessons learned, and deliver significant improvements to system integrity, reliability, and integrated safety. API maintains a portfolio of more than 700 standards that cover all aspects of the oil and natural gas industry, including 260 focused specifically on exploration and production activities.

In our ongoing effort toward continuous improvement of operations and building on existing API standards and practices pertaining to oil and natural gas extraction, API developed a set of five documents which specifically address the risk management issues accompanying well construction and management. First completed in 2011, revised in 2013, and reaffirmed in 2020 under API's accredited consensus-based standards development process, this robust series helps to protect the public by providing a blueprint for strong, carefully constructed wells. The standards were created to convey proven industry practices while remaining flexible enough to accommodate the variations in state and regional regulatory frameworks that often occur due to fundamental differences in regional geology and other factors, and to also serve as a reference for federal, state, and international regulators.

A new standard, focused on species and habitat conservation practices, is expected to be completed by mid-2021 and will provide strategies focused on landscape level planning, site-specific wildlife assessment, operational practices and habitat conservation/mitigation at the entry, exploration, development, production and exit phases of oil and natural gas development.

API has also taken proactive steps to address safety and environmental issues facing the industry by creating the Center for Offshore Safety (COS) and The Environmental Partnership (TEP). The COS serves the U.S. offshore oil and natural gas industry with the purpose of adopting standards of excellence to ensure continuous improvement in safety and offshore operational integrity. Among its responsibilities are compiling and analyzing key industry leading and lagging safety metrics; facilitating best practice sharing and learning; identifying and promoting opportunities for industry to continuously improve; and developing outreach programs to facilitate communicating with government and external stakeholders. TEP participants are committed to acting, learning, and collaborating to continually improve our industry's environmental performance. TEP has developed six programs designed to help companies further reduce emissions using proven, cost effective technologies.

API's standards development activities and our safety and environmental programs could serve as ideal venues to address safety and environmental performance items identified in the DOI comprehensive review.

## VII. Alaska Leasing and Development Considerations

Any review of the DOI oil and gas program should account and acknowledge the track record of success that has been demonstrated in Alaska. Oil and gas operations on federal lands in Alaska are subject to extensive environmental reviews, some of which have taken decades to complete, and have been conducted with what amounts to an impressive track record of environmental protection. Responsible access to the Alaskan and Arctic is in our national security interest. Nations like Russia, Canada and Norway actively exploring their resources while federal decision-making slows similar Alaskan energy development.[31] The EIA estimates that Alaska's proven crude oil reserves of 2.7 billion barrels are the fifth largest of any state and include considerable natural gas resources.

In terms of federal lands, two major resource areas offer opportunity for future energy development – the National Petroleum Reserve Alaska (NPR-A) and the Arctic National Wildlife Refuge (ANWR) Coastal Plain, which is often referred to as Area 1002 because of the corresponding use provision in the Alaska National Interest Lands Conservation Act (ANILCA).

NPR-A was created in 1923 as a dedicated oil reserve at a time when the U.S. Navy was converting the fleet from coal to oil. It encompasses about 23 million acres and is the largest single block of federally managed land in the U.S. The USGS estimates the reserve holds 896 million barrels of oil and 53 trillion cubic feet of natural gas. Additionally, ANWR is about the size of South Carolina. It includes Area 1002, of which 2,000 acres – about the size of a major metropolitan airport – was set aside for potential oil and natural gas development in 1980. DOI first recommended oil and natural gas leasing in the ANWR Coastal Plain in a 1987 report. The first lease sale was held in 2021, over 33 years later – in spite of support from the State of Alaska, North Slope Borough, Arctic Slope Regional Corporation ("ASRC") and the Katovik Inupiat Corporation ("KIC").[32] According to USGS estimates, Area 1002 holds between 4.3 billion and 11.8 billion barrels of oil.[33] At peak production, ANWR could supply more than 1.4 million barrels of oil per day**,** which will add essential volumes to the Trans-Alaska Pipeline as other energy sources diminish.[34] These resources will be significant in helping America

---

[31] Gary Roughead, "In the race for Arctic energy, the U.S. and Russa are polar opposites," Wall Street Journal (August 25, 2015), available at https://www.wsj.com/articles/in-the-race-for-arctic-energy-the-u-s-and-russia-are-polar-opposites-1440542608

[32] U.S. Dep't of Interior, Arctic National Wildlife Refuge Alaska, Coastal Plain Resource Assessment: Report and Recommendation to the Congress of the United States and Final Legislative Environmental Impact Statement (Apr. 21, 1987) ("1987 Report").

[33] USGS Fact Sheet, available at https://pubs.usgs.gov/fs/fs-0028-01/fs-0028-01.htm

[34] Dana Van Wagener, U.S. EIA, *Analysis of Projected Crude Oil Production in the Arctic National Wildlife Refuge* (May 23, 2018), https://www.eia.gov/outlooks/aeo/anwr.php.

maintain energy independence and providing a competitive advantage to U.S. manufacturers.

As a primary point, it is important to underscore that development decisions on federal lands in Alaska proceed cautiously, according to an extended timeframe that allows for careful deliberation according to a well-defined process which encompasses extensive environmental scrutiny as well as input from industry, NGOs, and stakeholders. For example, BLM manages activities in the NPR-A through an Integrated Activity Plan (IAP), which has served as the land and resource management plan for the entire area since 2013. Decades of environmental baseline studies and monitoring inform the agency's perennial National Environmental Policy Act (NEPA) analysis for updates to the IAP, culminating in a Final Environmental Impact Statement (FEIS). Development of the FEIS and its voluminous appendices involves an interagency team comprised of dozens of specialists from local, State, and federal agencies as well as tribal governments. The FEIS provides a wide-ranging analysis of the potential environmental impacts that could result from various alternatives, which address oil and natural gas leasing, exploration, and development as well as other land uses and activities – including but not limited to subsistence use and community infrastructure projects.

After fulfilling its legal requirements under NEPA, BLM issues a Record of Decision ("ROD") enumerating all of the unique mitigation measures developed by the interagency team after input from the public and special consideration provided for local resident stakeholders to protect NPR-A's natural environment and resident communities. The mitigation measures applicable to oil and natural gas development – in the form of lease stipulations, required operating procedures, and timing limitations – provided robust protection for resources while allowing BLM to permit responsible oil and gas leasing, exploration, and development activities.

This model, of the agency developing required operating procedures during the land use planning stage and evaluating activity-specific proposals during permitting has been demonstrated to be effective within NPR-A. BLM proposed a similar management strategy to protect resources within the ANWR Coastal Plain.

A 2015 Report by the National Petroleum Council (NPC) requested in 2013 by then-Secretary of Energy Ernest Moniz resulted in the 2015 *Arctic Potential: Realizing the Promise of Arctic Oil and Gas Resources*[35] report and a subsequent 2019 *Supplemental Assessment* report, which provided research and technology updates.[36] Together this body of work represents the single most objectively comprehensive assessment of the technical and operational capabilities of the oil and natural gas industry, under appropriate regulatory oversight, to explore for and to develop the oil and gas resource potential of the Arctic regions in a safe and environmentally responsible manner. We encourage the DOI to review this work, which underscored that the technology to develop most Arctic resources exists today, while outlining the importance of collaborative research programs between industry and government to

[35] National Petroleum Council, *Arctic Potential: Realizing the Promise of Arctic Oil and Gas Resources* (2015).
[36] National Petroleum Council, *Supplemental Assessment to 2015 Arctic Potential: Realizing the Promise of Arctic Oil and Gas Resources* (2019).

improve public confidence in the development of these resources. Opportunities exist to improve long-term population estimates of key species and to compare federal government leasing timelines with current U.S. lease durations and practices in other jurisdictions where development activities can occur year-round.

Energy development in Alaska continues to create well-paying jobs and provides an important revenue stream for the State of Alaska. Although Alaska no longer contributes about one-quarter of U.S. oil production (as it did in the mid-1980s), the resource potential of onshore areas including federal lands like the NPR-A and ANWR continues to increase due to technological advances. The Trans-Alaska Pipeline system has delivered over 18 billion barrels of North Slope oil in its over 40 years of operation. In fact, according to a letter submitted by Alaskan Oil and Gas Association ("AOGA"), "Over 77,600 Alaska jobs are attributable to oil and gas investment and activity, which represents 24% of all wage and salary jobs in Alaska. The oil and gas industry has contributed over $150 billion (not adjusted for inflation) to the State of Alaska through royalties and taxes and provides the largest cash contribution to the Alaska Permanent Fund. These benefits have been produced through an established record of safe and environmentally responsible development that is respectful of all of Alaska's natural resources."[37]

Reestablishing Alaskan jobs in other industries will not be easy. With participants at the recent DOI panel noting that the oil and gas industry accounts for nearly 25 percent of Alaskan jobs, the question of how to replace those positions looms large. As Senator Murkowski noted at CERA week, shipping costs mean that Alaska is unlikely to become a manufacturing center. Similarly, the COVID-19 pandemic has simultaneously showcased the instability of tourism and challenged the close quarters workspaces of the fishing industry. An April 9, 2021 report prepared by various Alaskan state agencies highlighted that the state unemployment insurance (UI) trust fund had a balance of $265.8 million – compared to $492.9 million in February of 2020 and the corresponding letter noted that only the "cancelled cruise ship situation in 2020, in addition to the potential cancellation of the 2021 season, will result in a loss to the State of Alaska's domestic product of over $3.3 billion." [38] Similarly, the Alaskan Seafood Marketing Institute expects the fisheries business revenues to decrease 19 percent in 2021.[39]

Additionally, it is important to note that many aspects of Alaskan oil and natural gas development enjoy support from a diverse array of native populations. For example:

- At the March 25, 2021 DOI virtual forum, Nicole Borromeo, Executive Vice President and General Counsel of the Alaska Federation of Natives (AFN) requested that oil and

[37] Alaska Oil and Gas Association, Letter to Department of Interior Re: ANWR Coastal Plain Lease Sale and Call for Nominations (December 17, 2020).
[38] Alaska Department of Revenue, et al. *Impacts to Alaska from the 2020-2021 Season Cruise Ship Season Cancellation* (April 9, 2021), available at https://gov.alaska.gov/wp-content/uploads/sites/2/04082021-Cruise-Impacts-to-Alaska.pdf and citing Alaskan "Department of Labor and Workforce Development as of 3/26/21"
[39] Alaska Seafood Institute, *Covid 19 Impact Report*s (March 2021), available at https://www.alaskaseafood.org/covid-19-impact-reports/

gas projects move forward with proper environmental safeguards and encouraged the Biden Administration to work with private industry on existing operations like the Willow Project in Alaska. She underscored that hundreds of Alaskan native communities rely on diesel generators and microgrids, that the oil and gas industry helps employ tens of thousands of Alaska Native families, and that federal energy policy should include traditional as well as emerging renewable forms of energy.

- In past Congressional testimony, Richard Glenn, the Executive Vice President for Lands and Natural Resources of the Arctic Slope Regional Corporation, which represents the business interests of about 12,000 Arctic Slope Iñupiat, noted, "The development of arctic oil and gas resources provides our communities with the means to preserve our traditional way of life and culture while also allowing our residents to enjoy a greater quality of life. Put another way, our communities cannot survive without continued resource development in our region."[40] At the same hearing, Matthew Rexford, then Tribal Administrator for the Native Village of Katovik – stated, "We will NOT become conservation refugees. We do NOT approve of your efforts to turn our homeland into one giant national park to benefit the environmental corporations at our expense. This literally guarantees us a fate of no economy, no jobs, reduced subsistence, and no hope for the future of our people. We, as Iñupiat people, have every right to pursue economic, social, and cultural self-determination. The laws of the U.S. should support Indigenous populations, not interfere with these basic human rights."[41]

## VIII. Offshore Leasing and Development Considerations

### A. Outer Continental Shelf Lands Act (OCSLA)

The OCSLA has overwhelmingly served the national interest well for decades. As stated in the OCSLA, "the outer Continental Shelf is a vital national resource held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner that is consistent with the maintenance of competition and other national needs." OCSLA clearly endorses a leasing program that is broad in scope and includes continued leasing in the various OCS planning areas, subject to appropriate environmental safeguards. API and its members feel strongly that OCSLA's purposes and national policy promoting competitive offshore leasing cannot legally be ignored.

[40] Richard Glenn, testimony on HR 1146, "Arctic Coastal Plain and Protection Act," U.S. House of Representatives Subcommittee on Energy and Mineral Resources of the Committee on Natural Resources, (March 26, 2019) available at https://naturalresources.house.gov/imo/media/doc/Testimony%20-%20ASRC%20-%20Glenn%20(w.%20figure).pdf (underlining not in the original)

[41] Matthew Rexford, testimony on HR 1146, ""Arctic Coastal Plain and Protection Act," U.S. House of Representatives Subcommittee on Energy and Mineral Resources of the Committee on Natural Resources, (March 26, 2019) available at https://naturalresources.house.gov/imo/media/doc/Testimony%20-%20Kaktovik%20-%20Matthew%20Rexford.pdf (outlining not in the original)

B. Safety and Environmental Performance

There are extensive environmental safeguards in place for offshore operations in the form of regulations and regulatory oversight of safety and spill prevention equipment, systems, programs, operational practices, and a highly trained and skilled workforce. The overall system of regulations, regulatory oversight, equipment, programs, best practices, and trained staff ensures that operations are conducted consistent with the policy objective described above. API looks forward to future discussion so it may provide a detailed, fact-based industry view on the safety and environmental safeguards that are in place and that have been extensively revised and enhanced on many occasions throughout the history of the OCS program. It is a process of constant and continuous improvement.

The offshore industry systematically assesses operating practices and management systems with the goal of continuous improvement in safety and environmental performance. The safety and environmental performance record over many years suggests that these efforts have been effective. These changes have made offshore oil and natural gas exploration and development safer, providing protection to communities and the environment.

We continue to work both independently and with the regulators to enhance the safety of offshore operations.[42] Many industry standards have been revised, enhanced or developed to cover areas including well design, cementing and operator/contractor interaction; blowout prevention equipment design, operation, repair and maintenance, and associated control systems; and subsea equipment interfaces with remotely-operated vehicles and well capping equipment.

C. Oil Spill Response Capability

In partnership with governments, academic institutions and communities, oil companies dedicate significant time and resources to preparing and planning for the unlikely case of an oil spill. This exhaustive preparation allows industry to respond appropriately to a spill of any magnitude to minimize its impact on people and the environment. Oil spill response organizations have significantly increased their capabilities over the past decade by increasing training and keeping in inventory more equipment that is fit for specific purposes such as in-situ burning. The industry has also invested in international oil spill preparedness and response programs focused on improving industry operational capabilities in all parts of the world and continues to advance an oil spill response research and development programs.[43]

For example, the Marine Well Containment Company[44] and the HWCG[45] were created in response to the Deepwater Horizon oil spill, and currently provide offshore member companies

[42] https://www.api.org/oil-and-natural-gas/health-and-safety/exploration-and-production-safety/offshore-safety
[43] http://www.oilspillprevention.org/
[44] https://marinewellcontainment.com/
[45] https://www.hwcg.org/

with advanced containment technology and response capabilities for the unique challenges of stopping the flow of oil thousands of feet below the water's surface. In the unlikely event that these services will be needed, these companies maintain quickly deployable systems that are designed to stem uncontrolled flow of hydrocarbons from wellbores located on the seafloor either by sealing the well or directing the fluids into storage vessels located on the surface of the water.

D. Technological Innovation

Another benefit of sustained and expansive U.S. energy policy in the Gulf of Mexico is that the U.S. oil and natural gas industry has become the world leader in offshore technology development. This is particularly true in terms of deepwater exploration, drilling, and development operations. This includes everything from the materials used in offshore operations, the development of software and control systems to manage operations, the development, production, and deployment of modern drillships and production facilities to bring energy to market, and the design and manufacture of blowout prevention equipment systems, subsea safety valves and other equipment. The U.S. must continue policies that foster exploration and development activities in new OCS areas so that we remain on the forefront of area-specific technology development rather than leave this to other countries.

E. Leasing and Development

The Gulf of Mexico has been the backbone of U.S. energy production for years, providing more than one million barrels of oil per day for the last twenty years. The importance of predictability and certainty in the offshore leasing program cannot be overemphasized and are crucial to a successful national energy policy. Companies need regular access to competitive leases to make the long-term commitments required for offshore development, particularly for investments at the magnitude required for deepwater projects and frontier areas. As technology improves and economic conditions change, leases once deemed noncommercial may evolve into viable exploratory drilling or development candidates with commercial potential. Because of this evolution, it is important to allow innovative companies the opportunity to pursue new leases to test innovative geologic concepts and to employ advancements in drilling and production technology. A continuous stream of new discoveries is needed to replace depleted reserves and help maintain or increase production levels. Without the opportunity to obtain substantial acreage through new leases, companies will be enticed to turn their attention and investment dollars to prospects in other parts of the country or the world, where volumes are unlikely to compete with the comparative efficiencies and advantages of the US Gulf of Mexico. Such an outcome would make no sense for the Administration's shared goals.

API fully supports continued use of the current area-wide leasing program in all OCS areas. It is important to not mistake the meaning of "area-wide leasing," which is simply a single lease sale that combines more than one Planning Area; it does not in fact avail 100% of the acreage within those respective areas and should not be construed to somehow expand

available acreage (e.g., limitations still exist, such as the Flower Garden Banks National Marine Sanctuary).

F. Bonding and Financial Assurance

A comprehensive review of the federal oil and gas program should include a review of the bonding and financial assurance regime; to that end, API reiterates its prior position that it is both unreasonable and legally questionable to retroactively impose increased burdens on entities that no longer have any privity with the federal government through relying on the financial wherewithal of predecessor interest owners instead of current interest owners, and through arguably expanded imposition of joint and several liability to predecessors. What is more, a failure to address the bonding and financial assurance issue perpetuates and prolongs a risk to the environment, as current operators have little or no incentive to responsibly maintain or decommission their aging assets.

API commends BOEM and BSEE for their collective efforts to undertake a rulemaking addressing the complicated issues surrounding bonding and financial assurance; a rulemaking is the appropriate vehicle. However, API members generally disagree with the agencies' 2020 proposed approach[46] of reducing financial assurance and decommissioning liability obligations for current OCS lease and grant interest holders and correspondingly shifting these burdens to entities that formerly held those interests. The result of that approach would be less financial assurance for currently conducting OCS oil and gas activities. Predecessors also unquestionably bear no liability for lease obligations accrued after assigning that lease. However, API supports the 2020 proposed approach to issue decommissioning orders first to all current owners, and then—only in the event all current owners fail to perform their decommissioning obligations—to the predecessors in reverse chronological order through the chain of title.[47]

Lastly, and as with most subjects in this comprehensive review of the federal oil and gas program, the Interior Department need not institute a pause on new leasing to optimize policy improvements on the bonding and financial assurance regime.

## IX. Onshore Leasing and Development Considerations

DOI's review should also recognize the unique environmental framework for operating on federal lands, which includes but is not limited to any location-specific constraints incorporated into in an area-wide Record of Decision (ROD) after robust environmental reviews and stakeholder engagement processes, BLM rules and standards, as well as applicable federal and state environmental laws. The following sections spotlight noteworthy EPA, state, and industry efforts which DOI may wish to recognize as part of its process.

[46] https://www.federalregister.gov/documents/2020/10/16/2020-20827/risk-management-financial-assurance-and-loss-prevention

[47] See API's 2019 Comment Letter to DOI which contains more detail on the merits of RCO: https://www.regulations.gov/document/DOI-2017-0003-0266

The totality of this comprehensive framework enhances the industry's ability to carry out operations for safe and environmentally responsible exploration and production activities on lands administered by state and federal authorities, including production via the use of hydraulic fracturing and horizontal drilling in unconventional plays. To this end, it is significant that BLM rules and standards for drilling and production require all operations on federal land to comply with state and local regulations to protect life, property, and the environment. While structured to meet the specific hydrology, geology, production volumes, and unique features of the state, regulations in the 33 oil and gas producing states are comprehensive. These requirements include extensive monitoring requirements, which further validate that ongoing oil and natural gas production activity in a planning area avoid impacts to water resources, air, and the surrounding surface environment.

Furthermore, industry standards and practices work in combination with federal and state regulations to provide an additional layer of environmental protection. Formulated by the industry's standard-setting program, these recommended practices cover all aspects of the industry's work and are consistently updated as a part of the industry's ongoing effort toward continued improvement of operations. These considerations were all considered in the recent judicial affirmance of BLM's 2017 hydraulic fracturing rule.

A. Protection of Groundwater Resources

Hydraulic fracturing in the United States has been conducted for over seven decades. During this time industry has developed techniques for improving well drilling, cementing, and casing to protect freshwater sources, restrict fluids to the intended zone and enable efficient hydrocarbon production. The primary means of ensuring that underground sources of drinking water are protected is by carefully casing the well with steel pipe and cementing it into place to create a tight seal. Several redundant layers of steel casings and cement sheaths are sequentially installed to provide layers of protection. After installation, the cement is tested to evaluate its strength and seal.[48] Well integrity is a top priority for the industry in protecting subsurface water resources and is carried forward in compliance with state and local requirements. EPA initiated a study in 2010 intended to investigate the potential impacts of hydraulic fracturing on water resources. EPA publicly released the Draft Assessment Report titled *Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources* on June 4, 2015 with a topline conclusion of **"**no systemic widespread impacts from hydraulic fracturing," The final SAB reviewed study was released in December of 2016.

The Groundwater Protection Council ("GWPC") – an organization whose members consist of state ground water regulatory agencies working together toward the comprehensive protection of the nation's ground water supplies – released a third edition report in 2017 titled "State Oil and Natural Gas Regulations Designed to Protect Water Resources." It provides a

[48] http://www.api.org/~/media/Files/News/Infographics/Cementing_A_Seal_For_Safety.pdf (outlining not in the original)

compiled list of regulatory elements such as permitting, well integrity, hydraulic fracturing, well plugging, pits, tanks and spill management and describes the regulatory framework under which oil and natural gas field operations are managed at the state level.[49]

B. Protection of Surface Waters

Industry also carefully manages water at the surface at all stages of operations. This applies throughout the water cycle and includes sourcing, transportation and use as well as treatment, reuse, or disposal. Technological, and in certain cases, state regulatory advances have allowed producers to minimize use of fresh water sources in favor of non-potable, lower quality water or produced water. Water reuse within the oil and natural gas industry is also encouraging development of more efficient, more mobile water treatment technologies that could eventually be scaled and utilized by other industries.

The federal government creates framework environmental laws that often prescribe regulatory minimum thresholds for states to follow. For example, the Clean Water Act ("CWA") applies to oil and natural gas operations, particularly where water resource protection, and in certain cases, restoration is concerned. Under the federal structure, states are authorized to be the primary stewards and regulators of their water. Most states have extensive water quality and quantity regulations overseen by a wide range of agencies and include key program areas to support the CWA's "fishable, swimmable" goals for all surface waters in the state. These programs assess the quality of the surface waters, set standards for protection of the waters, and establish plans to bring impaired waters back into attainment with water quality goals.

For instance, EPA allows states, tribes, and/or territorial governments to implement the National Pollutant Discharge Elimination System ("NPDES") permit program. Oil and natural gas operators manage stormwater and other wastewater discharges from their sites by acquiring NPDES permits. Operators must seek coverage under construction and operating permits; prepare compliant Stormwater Pollution Prevention Plans ("SWPPP"); and implement best management plans ("BMPs") and controls (including routine inspections and testing of upstream discharge points) to prevent impacts to receiving water bodies. The NPDES program further requires permits and engineering and other controls (including routine inspections and testing) for any discharge of wastewater from oil and natural gas sites.

A separate provision of the CWA defines requirements for oil pollution prevention. Regulation requires oil and natural gas operators prepare Spill Prevention, Control, and Countermeasures plans, implement controls, and establish BMPs to prevent impacts to receiving water bodies from tanks and other structures that hold oil on site.

[49] https://www.gwpc.org/sites/gwpc/uploads/documents/publications/State_Regulations_Report_2017_Final.pdf

C. Chemical Disclosure

Approximately 99.5 percent of the contents of most hydraulic fracturing fluid systems are well-known and widely disclosed: water (90 percent by volume) and a proppant (typically sand or other non-toxic material, which constitutes 9.5 percent by volume). The substances most commonly found in the additional 0.5 percent of hydraulic fracturing fluid systems are also commonly found in food, cosmetics, detergents and other household products.[50] These substances are essential for efficient delivery of the proppant to the rock fractures, reduction of friction, which in turn reduces the energy required to pump, and in the prevention of corrosion and scale build up which is detrimental to equipment and overall production. The combination of chemicals used by certain service companies, who typically carry out the actual fracturing operations, can be of a proprietary nature and receive similar protections from disclosure offered to other industries. The industry generally protects specific ingredients within additives that commonly represent less than a thousandth of a percent (0.001 percent) of the total hydraulic fracturing fluid volume. Even in those narrow circumstances, where precise chemical identification is not publicly released, the industry typically provides chemical category information that allows the public to identify the class and function of the chemical. Further, several states require that the precise identity of these ingredients be disclosed to regulators, physicians, and emergency personnel.

As a part of stakeholder engagement and to maintain a high level of transparency with communities, companies report specific information about fracturing fluid used at an individual well via a voluntary, publicly accessible website: www.FracFocus.org. This chemical disclosure registry was developed in 2011 by the GWPC and the IOGCC, two organizations comprised of state regulators that oversee the oil and natural gas industry. An ever-improving collaborative initiative, FracFocus is moving into its fourth generation with water sourcing information being added to the database in 2021.

FracFocus.org also serves as a reporting method to meet state disclosure requirements for 26 states including: Alabama, Alaska, Arkansas, California, Colorado, Idaho, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Montana, Nebraska, New Mexico, Nevada, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Texas, Tennessee, Utah, West Virginia, and Wyoming.[51] As of March 2021, chemical information on over 180,000 wells is contained within the registry.

[50] Department of Energy/Groundwater Protection Council: Modern Shale Gas Development in the United States: A Primer (2009)

[51] California has implemented its own reporting system but does require concurrent reporting to FracFocus. Arkansas and Wyoming do have FracFocus records in the database (because operators submit them to FracFocus) but neither state requires the use of FracFocus for official state reporting.

Finally, safety data sheets ("SDSs") contain safety, health, and environmental information for ingredients of the products used (including those denoted as proprietary). SDS documents must be available onsite for the substances used in the hydraulic fracturing process as required by the Occupational Safety and Health Administration ("OSHA").

D. Waste Management

There are four general categories of exploration and production wastes associated with operations. They include drilling muds and residuals, produced water, associated wastes, and some industrial wastes, and are managed in accordance with state and federal environmental laws as well as numerous industry recommended practices and standards. In many states, companies submit waste management plans as part of the permitting process to ensure that waste management options are carefully considered long before drilling ever begins.

The industry generally manages waste in a tiered process designed to best protect public and environmental health: reduce, reuse/recycle/treat, and dispose. Reduction involves efforts like decreasing the volumes of waste generated and determining if more environmentally friendly (but equally effective) chemical substitutes are available. The second tier involves reclaiming and reusing as much waste as possible, using treatments that reduce the waste produced, thereby reducing the amounts that must be disposed. The third tier involves environmentally sound and responsible methods of disposing of generated waste materials.

In 1988, EPA determined that it would not regulate these wastes as hazardous under the Resource Conservation and Recovery Act ("RCRA"). In its regulatory determination EPA indicated that state and federal regulations were generally adequate, but that some regulatory gaps existed and enforcement actions in particular states needed improvement. To fill the gaps and work to improve state programs, a novel multi-stakeholder program was developed known as State Review of Oil and Gas Environmental Regulations—or STRONGER[52]—comprised of federal, state, industry, and non-governmental organization (NGO) representatives responsible for reviewing the environmental programs of oil and gas producing states. The existence of the STRONGER program is highly relevant to any discussions regarding the federal oil and gas program as it provides another forum for validating the adequacy and effectiveness of existing regulatory programs.

It is important to note that following an exhaustive inquiry[53] initiated in late 2016 and finalized in 2019, EPA determined that revisions to the federal regulations for the management of exploration, development and production wastes of crude oil, natural gas, and geothermal energy under Subtitle D of RCRA (title 40 of the Code of Federal Regulations in Part 257) were not necessary. This was largely due to the efficacy of state frameworks in handling the

[52] https://www.strongerinc.org/

[53] *Management of Oil and Gas Exploration, Development and Production Wastes: Factors Informing a Decision on the Need for Regulatory Action*

management of these wastes. This finding remains relevant for the purposes of DOI's recently initiated review.

E. Air Emissions

Natural gas has had an expanding role in maintaining a national trend of air emissions reductions. It is the major reason why the U.S. has reduced carbon emissions more than any other nation, even while leading the world in the production of both oil and natural gas. API believes this reality is not being adequately acknowledged and reflected in DOI's comments and approach to the oil and gas program review. Just last month the nonpartisan International Energy Agency ("IEA") issued its latest report, finding that global energy-related carbon dioxide emissions flattened in 2019 – even as the world economy expanded by 2.9% – in large part due to the increased use of natural gas. The U.S. recorded the largest emissions decline of any country, down 140 million tons from the previous year. The IEA's executive director even referred to the findings as "grounds for optimism that we can tackle the climate challenge this decade [and] evidence that clean energy transitions are underway." Clearly, natural gas is integral to achieving domestic and global emissions-reduction and climate goals.

From an operations perspective, the production and transmission segment of the industry has been subject to a series of federal Clean Air Act regulatory programs over the past several years, which have also contributed to the positive story of reductions in greenhouse gases and overall emissions.

Since 2012, new sources of volatile organic compound ("VOC") emissions from the oil and natural gas sector have been regulated by EPA's New Source Performance Standards (NSPS) at 40 CFR Part 60, Subpart OOOO and by subsequent Subpart OOOOa. President Biden's January 20, 2021 Executive Order "Public Health and Environment Restoring Science to Tackle Climate Change" calls for proposing new regulations to establish comprehensive standards of performance and emission guidelines for methane and VOC emissions from existing operations by September 2021. API supports the direct regulation of methane and cost-effective policies that achieve methane emission reductions from new and existing sources across the supply chain.

As previously mentioned, to demonstrate industry's commitment to addressing emissions, API launched and administers a voluntary program, The Environmental Partnership, for oil and natural gas production companies to continually improve their environmental performance.[54] With 91 participating companies, the immediate focus of the program is on actions to further reduce methane and VOC emissions using proven cost-effective technologies and practices in upstream and midstream operations. In 2020, The Partnership launched a new Flare Management Program[55] to reduce flaring of associated gas in oil fields by advancing best practices to reduce flare volumes, promote the beneficial use of associated gas, and improve

[54] https://theenvironmentalpartnership.org/

[55] https://www.api.org/news-policy-and-issues/news/2020/12/16/tep-flare-management-program-launch

flare reliability and efficiency when flaring does occur. The Environmental Partnership is an example of our forward-looking commitment to delivering on a continuous cycle of learning, collaborating, and taking action.

## X. Orphaned Onshore Wells

The Interstate Oil and Gas Compact Commission (IOGCC) defines an "orphan well" as a well that is not producing, injecting, or otherwise being used for its intended purposes and for which the operator is unknown or insolvent[56]. According to BLM, there are over 96,000 producing and service wells on federal lands[57], but only 296 identified orphaned wells[58], which equates to a 0.3% default rate on public lands. The vast majority of oil and gas wells are plugged and abandoned by the operator or covered by existing financial assurance. Even though operators are legally obligated to "plug and abandon" – or close wells permanently – on their federal leaseholds, API supports reasonable minimum bonding amounts and an objective financial assurance program for decommissioning and reclamation costs for onshore federal wells, well sites and facilities. API supports the continued use of blanket surety bonds at the lease, statewide and national level as they reduce the administrative burdens on both BLM and the operators and have proven effective in minimizing federal orphaned wells. API recognizes the federal government's ability to use existing tools, like 43 CFR § 3104.5(b), to increase decommissioning financial security from responsible parties on a case-by-case basis and supports accelerating enforcement action when appropriate. In addition to requesting financial assurances from responsible parties, each current and former responsible party remains legally obligated to plug and abandon wells it previously owned in the event current responsible parties fail to do so, adding another layer of safety net between decommissioning costs and the U.S. taxpayer.

As wells age and become idled, the existing Idled Well Review and Data Entry policy helps ensure that the BLM field offices regularly review all nonoperational wells and take appropriate steps to reduce the BLM's nonoperational and idled well inventory.[59] This policy requires BLM to review one-fifth of the idled wells on federal lands annually and issue decommissioning orders where appropriate, helping to reduce the U.S. government's potential liability. The legal obligation to conduct plug and abandonment proceedings, coupled with financial assurance requirements and the Idled Well Review Process all help to keep the inventory of orphaned wells on federal lands significantly low.

---

[56] "Idle and Orphan Oil and Gas Wells: State and Provincial Regulatory Strategies", Interstate Oil and Gas Compact Commissions, 2019. Page 7
https://iogcc.ok.gov/sites/g/files/gmc836/f/2020_03_04_updated_idle_and_orphan_oil_and_gas_wells_report_0.pdf

[57] "Oil and Gas Statistics: Table 10 Producible and Service Completions", Bureau of Land Management, October 1, 2020, https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics

[58] "Oil and Gas, Bureau of Land Management Should Address Risks from Insufficient Bonds to Reclaim Wells", U.S. Government Accountability Office, September 2019. https://www.gao.gov/assets/gao-19-615.pdf

[59] Instruction Memorandum 2020-006, Idled Well Reviews and Data Entry" U.S. Bureau of Land Management, December 10, 2019. https://www.blm.gov/policy/im-2020-006

Almost all the existing orphaned well inventory is located on state and private lands, which are managed by state programs. According to the most recent IOGCC report on orphaned wells, there are approximately 56,000 documented orphaned wells onshore in the United States.[60] Over the last three decades there has been very little increase in the overall inventory of documented orphaned wells, many of which were likely orphaned prior to existing state regulatory programs. These current state programs use a combination of idled well requirements and financial instruments including surety and performance bonds, letters of credit, cash deposits, operator's financial statements and more to prevent orphaned wells on state and private lands. Notably, most of the bonds and other insurance instruments are never used because operators plug and abandon their wells successfully. The absence of any significant increase in documented orphaned wells shows that states have successfully managed oil and gas well inventories over the last several decades, minimizing new orphaned wells. It is also important to understand that most major producing states have programs, generally funded by operator fees, to pay for proper abandonment of private and state orphaned wells which represent nearly 100% of the known orphaned wells. However, to make a significant impact on the existing and often inherited inventory of orphaned wells, API supports the establishment of federal grants to fund existing state programs dedicated to plug and abandon orphaned wells and orphaned facilities on state and private lands.

API is committed to working with DOI as it reviews its orphan and idled wells policies, and any opportunities to assist states in their efforts to plug and abandon orphaned wells on non-federal lands. If federal funds are ultimately committed for this purpose as requested by President Biden, API recommends the IOGCC's involvement as a leading partner to work along with the states and DOI.

## XI. Oil & Natural Gas Industry Greenhouse Gas Emissions Reductions

Our industry is steadfastly committed to furthering emissions reductions to meet the goals of the Paris Agreement and tackle climate change, while providing affordable, reliable energy to the American people. We support common-sense, durable regulations complemented by industry-led innovations and initiatives like The Environmental Partnership[61] to achieve these goals. From 2005 to 2019, the EIA reports that $CO_2$ emissions in the U.S. from total energy consumption declined by 14.2 percent across the economy, with much of that reduction due to the transition from coal to natural gas in the power generation sector.[62] Additionally, over the past decade, methane emission rates relative to oil and natural gas production in the key producing U.S. basins have declined nearly 70 percent.[63]

---

[60] "Idle and Orphan Oil and Gas Wells: State and Provincial Regulatory Strategies", Interstate Oil and Gas Compact Commissions, 2019. https://iogcc.ok.gov/sites/g/files/gmc836/f/2020_03_04_updated_idle_and_orphan_oil_and_gas_wells_report_0.pdf

[61] https://theenvironmentalpartnership.org/

[62] U.S. Energy Information Administration, *"Monthly Energy Review"* https://www.eia.gov/totalenergy/data/monthly/pdf/mer.pdf March 2021.

[63] API, *"API Statement on Social Cost of GHG Emissions"* https://www.api.org/news-policy-and-issues/news/2021/02/26/social-cost-of-carbon February 21, 2021.

The U.S. can meet its climate goals while maintaining oil and natural gas leasing, exploration, and development on federal lands and waters. As outlined in our *Climate Action Framework*, API members are investing billions toward new, innovative technologies to improve environmental performance and further reduce emissions. This includes enhanced monitoring using satellite, drone, and aerial greenhouse gas detection technologies.[64] For offshore operations, leak detection measures can include periodic monitoring using Optical Gas Monitoring (OGI), as one example. Because of these efforts, greenhouse gas emissions from the extraction and combustion of oil and natural gas from federal lands accounted for less than 10% of the total estimated U.S. greenhouse gas emissions according to recently-cited data presented by the United States Geological Survey (USGS).[65] Additionally, over 98% of the greenhouse gas emissions often cited as associated with the "production" of oil and natural gas on federal lands is from the end use (combustion) of the resource, not from extraction.[66]

Even if oil and natural gas production on federal lands and waters were banned or significantly curtailed, there is no basis to expect demand to drop. Meeting that demand will simply require importing more oil and natural gas. Such supply would likely be provided by imports from countries with significantly different standards, or alternatively through the increased production from state, private, and Indian lands. This scenario would not result in a reduction in greenhouse gas emissions but rather a reduction in funds received by the U.S. Treasury from royalty payments. In fact, in addition to API's own analysis, an Obama-era BOEM report that analyzed the effects of offshore leasing restrictions recognized that GHG emissions would likely *increase* in the absence of new offshore leasing due to increased foreign imports transported from overseas.[67] Such a result would directly counteract the Administration and industry's shared goal of reducing GHG emissions due in part to production in countries with lower environmental standards, and transport of product to the U.S.

## XII. NEPA Reforms

As DOI conducts a comprehensive review of the federal oil and gas program, it should assess the National Environmental Policy Act's (NEPA) application to federal oil and gas activities. Since NEPA was enacted over 50 years ago, and particularly over the past decade, it is the collective experience of API and its members that the scope of NEPA reviews has expanded dramatically. With each step of the onshore oil and gas leasing and development

[64] See, e.g., "Big Oil Is Cutting Emissions. With Big Data, It Will Do It Quicker," *RealClearEnergy,* April 1, 2021. https://www.realclearenergy.org/articles/2021/04/01/big_oil_is_cutting_emissions_with_big_data_it_will_do_it_quicker_770952.html.

[65] U.S. Geological Survey, "*Federal Lands Greenhouse Gas Emissions and Sequestration in the United States: Estimates for 2005–14*" 2018 https://pubs.er.usgs.gov/publication/sir20185131

[66] U.S. Geological Survey, "*Federal Lands Greenhouse Gas Emissions and Sequestration in the United States: Estimates for 2005–14*" 2018 https://pubs.er.usgs.gov/publication/sir20185131

[67] U.S. Department of the Interior, "*OCS Oil & Natural Gas: Potential Lifecycle Greenhouse Gas Emissions and Social Cost of Carbon*" https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/Leasing/Five-Year-Program/2017-2022/OCS-Report-BOEM-2016-065---OCS-Oil-and-Natural-Gas---Potential-Lifecycle-GHG-Emissions-and-Social-Cost-of-Carbon.pdf November 2016.

process, an opportunity for NEPA analysis is presented, from resource management plans and land use plans, to lease sales and Applications for Permits to Drill (APDs). Offshore, NEPA reviews are conducted at multiple stages beginning with the Five-Year Program, leases sales, exploration, and development. Despite decades of Council on Environmental Quality (CEQ) guidance and related case law, the NEPA review process overall remains complex, time-consuming, and uncertain, which in turn reduces investment in the nation's energy resources and infrastructure.

However, recent changes made by the CEQ and DOI have codified best practices, made improvements to the overall efficacy of NEPA, and should continue to be implemented by DOI. One example is the removal of the requirement for agencies to separately assess "cumulative effects" rather than focusing on the reasonably foreseeable effects caused by a proposed action. This term does not appear in NEPA and has led to confusion, duplication of efforts, and waste of agency resources in ascribing unascertainable or irrelevant effects to oil and gas actions. As CEQ correctly points out that even determining what a cumulative effect is has led to "confusion," "been interpreted expansively[,]" and "result[ed] in excessive documentation about speculative effects[.]"[68] Additionally, API believes DOI should fully utilize categorical exclusions (CX's) that other agencies use for similar activities as a tool to satisfy NEPA obligations. CEQ's recent revisions to the definition of CXs and the reorganization of the regulations will provide greater clarity to DOI and promote more efficient NEPA reviews. Furthermore, the new requirement that CXs be made available in a publicly searchable database help promote public transparency. [69] DOI has also been a leader in institutionalizing process reforms to render NEPA documents more efficient and readable and should not backtrack to unproductive delays for the purpose of creating paperwork rather than informing agency actions.

DOI should also continue to promote efficiencies in the public commenting and engagement process through implementation of new provisions in §§ 1500.3(b), 1502.18, and 1501.5(d). These changes will result in more informative public comments, conserve agency resources, and cut down on speculative claims in litigation. Many agencies commonly deem comments not timely raised and information not provided to be forfeited,[70] and this change will reaffirm and encourage this basic, orderly concept of administrative law. It will also help

[68] 85 Fed. Reg. 1,707.

[69] § 1508.1(d) and recodified §§ 1501.4 and 1501.5(a), respectively.

[70] Certain statutory provisions, such as § 4(b) of the Endangered Species Act, require agency actions to be proposed and finalized on strict schedules that necessarily limit the time period for public comment. See also Fla. Power & Light Co. v. United States, 846 F.2d 765, 733 (D.C. Cir. 1988) (holding a 15-day comment period not unreasonable under the circumstances). Agencies are generally free to ignore late filings. See, e.g., Appalachian Power Co. v. EPA, 249 F.3d 1032, 1059 (D.C.Cir.2001) ("An agency is not required to consider issues and evidence in comments that are not timely filed.") (citing Personal Watercraft Indus. Ass'n v. Dep't of Commerce, 48 F.3d 540, 543 (D.C.Cir.1995)). See also Pub. Citizen [FULL CITE], 541 U.S. at 764 ("Persons challenging an agency's compliance with NEPA must structure their participation so that it ... alerts the agency to the [parties'] position and contentions, in order to allow the agency to give the issue meaningful consideration." (internal quotation and citation omitted)).

agencies remedy potential issues before they need to be litigated while continuing to provide robust analysis in line with NEPA requirements.

## XIII. Closing

Again, API appreciates the opportunity to provide our views on the current federal oil and natural gas program. The pursuit of economic, environmental, and national security interests necessarily depends upon a national long-term energy policy that relies upon U.S. oil and natural gas exploration and production to meet our energy needs. Industry remains committed to working with President Biden and his administration to address climate considerations in the federal oil and natural gas program and meet our shared goals while still maintaining a robust U.S. industry.

Sincerely,

Kevin O'Scannlain
Vice President, Upstream Policy