## Oil & Gas Bonding Reform Is A Common-Sense Solution to A Significant Problem: Just Look At Wyoming

**SUMMARY:** When an oil and gas company wants to develop federal minerals, it is required under the Mineral Leasing Act (MLA) to provide a bond sufficient for ensuring that the well will be cleaned up in case the operator goes bankrupt or otherwise abandons the well without having fully plugged and adequately reclaimed it.

Companies are similarly required to post bonds when they drill on lands under state jurisdiction, as well. Because every state takes a different approach to the management of oil and gas operations, bonding requirements look different across different states' lands. This is why it is critical that the Bureau of Land Management (BLM) maintain oversight responsibility of the federal bonding program, to ensure that all the wells drilled on federal lands and minerals across the country are fully plugged and adequately reclaimed.

Many factors can significantly increase the cost of cleaning up oil and gas wells, and under the MLA the BLM is supposed to set bond amounts at the necessary level for ensuring that "complete and timely" reclamation occurs. The minimum bond amounts provided in the BLM's leasing policies are meant to provide baseline levels for federal oil and gas bonds, but the current minimum amounts were first set in the 1950s and 1960s, and they have not been updated since – not even to account for either inflation or the changes in technology that now allow for oil and gas companies to drill deeper, more destructive wells.

As a result, the Government Accountability Office (GAO) has found the average bond amount that the BLM holds for all oil and gas wells to be grossly inadequate for covering the costs associated with cleaning up just one well, let alone the costs for cleaning up all of the wells covered by a single blanket bond. This is why U.S. taxpayers have already been left with the enormous bill required to foot the difference and protect public health, safety, and the environment from the threat of orphaned wells – costs that should instead be borne by the oil and gas operators who created the pollution in the first place. According to the BLM, there are at least 15,000 orphaned wells already littered on public lands across the country. Under current bonding requirements that govern the onshore oil and gas leasing system, this number is expected only to increase.

Thankfully, common-sense solutions to reform the federal bonding program are underway, as the Interior Department has proposed to, among other necessary changes, revise the minimum oil and gas bond amounts to protect taxpayers from having to bear the industry's reclamation-related liabilities. Adequate bonding regulations are critical for ensuring complete and timely reclamation of oil and gas well sites and go a long way towards protecting our public lands, waters, wildlife, and communities. Moreover, in order to reap private benefit from public resources, it is perfectly reasonable that oil and gas companies be required to put up the full amount of money necessary for ensuring they clean up after themselves.

The BLM's proposed updates to its bonding framework are coming after updates that have been made to several states' bonding policies in recent years. The state of Wyoming in particular offers a useful case study for examining how bonding reform does not harm the

industry, and still allows for oil and gas companies of all sizes to profitably operate. Wyoming updated its bonding regulations in 2015 without any complaint from companies with operations on state and private lands. After the new requirements went into effect, oil production steadily increased, and in 2018 oil production on state lands hit its highest level in 2018. The upward trend was driven by hundreds of new wells drilled by a variety of oil and gas companies including smaller, local companies.

As the BLM undergoes its rulemaking to reform the antiquated federal onshore oil and gas leasing program, it is clear that long-overdue updates to the federal bonding system will do little to impact the industry's continued ability to operate on federal public lands, and will instead have significant benefit in protecting public lands from becoming riddled with orphaned wells and protecting American taxpayers from being stuck with the bill to clean them up.

The State of Wyoming Dramatically Improved Its Bonding Requirements For Oil And Gas Wells In 2015.

The Industry Has Only Flourished Since.

## <u>In 2015, Wyoming Increased The Costs For Bonding On State Public Lands & Private Lands.</u>

The Bust Of Wyoming's Coalbed Methane Industry Left Thousands of Abandoned Wells Littered Across The State. The Total Costs Of Reclaiming These Wells Reached Tens Of Millions Of Dollars – Far-Exceeding The Total Amount In Bonds That The State Had Available For Cleanup.

When The Coalbed Methane Industry Went Bust, The State Of Wyoming Was Left Having To Deal With The Clean Up Of Almost 4,000 Abandoned Wells. "When energy booms go bust, the public is often left responsible for the cleanup. That's because while most states and the federal government make companies put up at least some money in advance to pay for any mess they leave behind, it's often not enough. After the methane industry collapse, there were almost 4,000 wells in Wyoming that the company responsible walked away from." [NPR, 10/19/15]

The Mess Created By These Abandoned Wells Combined With The Insufficiency Of The Bonds That Were Supposed To Cover Them Risked Costing The State Tens Of Millions Of Dollars. "Now Gillum and Campbell, who work for the Wyoming Oil and Gas Conservation Commission, are in charge of making sure they get cleaned up and plugged. In Wyoming, the bust of the coalbed methane industry has left the state on the hook for tens of millions of dollars in cleanup. While most states and the federal government make companies put up at least some money in advance to pay for any mess they leave behind, it's often not enough." [KUNC, <u>09/28/15</u>]

In Response, A State Regulatory Agency Headed By Republican Governor Matt Mead Unanimously Decided To Increase The Cost To Bond Wells.

In 2015, Wyoming's State Oil Regulator Voted Unanimously To Raise Bonding Rates. "The Wyoming Oil and Gas Conservation Commission voted unanimously Tuesday to raise the bonds oil and gas companies pay on their wells, effectively increasing the rate from \$25,000 to \$100,000. The move...represented Wyoming's response to thousands of coal-bed methane wells abandoned throughout the Powder River Basin in recent years." [Casper Star-Tribune, 12/08/15]

• The Decision To Update The State's Oil And Gas Bonding System Was A Common-Sense Action, Necessary For Addressing The Root Cause Of The Orphaned Well Crisis That The State Found Itself Dealing With - And That The State Didn't Want To Be Dealing With Again In The Future. "When it comes to reclamation, we don't think much about it during the boom, but then all of a sudden, when the rigs have left, the employment is gone, then we start looking at what we have and wondering why we didn't spend more time figuring out how to solve that problem before it became a problem." [Wyoming Public Media, 08/30/13]

Wyoming Increased The Rate For Statewide Bonding To \$100,000 – Quadrupling What Most Operators Had Paid Under Old, Lax Rules.

Wyoming Raised Its Blanket Bonding Rate To \$100,000 After Most Operators Had Been Paying Just \$25,000 To Cover All Of Their Wells Across the State. "Under the former rules, the bonding rate for an individual well was \$10,000 for wells of less than 2,000 feet and \$20,000 for wells deeper than 2,000 feet. The new rule applies a rate of \$10 per foot for all wells. But many companies choose to post what is called a blanket bond, which covers all their wells. The commission set a blanket bond rate of \$75,000 several years ago, but the majority of producers (some 196 firms) were grandfathered under the rule. They maintained blanket bonds of \$25,000. The changes approved Tuesday remove that provision and raise the blanket bond rate to \$100,000." [Casper Star-Tribune, 12/08/15]

• The New Rules Gave Regulators More Oversight Of Well Transfers, And Included Important Provisions Allowing For Additional Bonding By New Operators, If Existing Bonds Were Insufficient. "The new rules also give regulators more oversight when wells are sold from one company to another. During the coalbed methane boom, large companies sold their wells — and the responsibility for plugging them — to smaller companies that then went under when prices crashed. As proposed, the new rules would allow the Oil and Gas Commission to hold on to the seller's bond for up to six months, to make sure the buyer is financially sound." [KUNC, 09/28/15]

The New Rules Added A \$10 Per-Foot Cost For Wells Covered Under Individual Well Bonds, To Reflect The Higher Cleanup Cost Associated With Modern, Deeper Wells. Bonds for Individual Wells Are Also Required to Be Adjusted Every Three Years, To Account For Both Inflation And Actual Plugging Costs.

The New Rules Also Required That Individual Wells Be Bonded At A Rate Of \$10/Foot To Account For Deeper Wells Requiring More Money To Clean Up.

"Currently, instead of posting a blanket bond, companies with only a small number of wells currently may opt to post \$10,000 bond for each well less than 2,000 feet deep and \$20,000 for each well deeper than that. That will change to a flat rate of \$10 per foot of the well bore distance under the new rules." [Associated Press, 12/08/15]

The Requirement That Bonds For Individual Wells Be Based On Depth Acknowledges That The Cost of Plugging and Reclaiming Wells Has Gone Up Over Time As Technology Now Allows For Companies To Drill Deeper, More Complex Wells. "In the past, the majority of orphaned wells were shallow (2,000 feet or less) coalbed methane wells on small pads. Today, horizontal oil wells range from 10,000 to 15,000 feet deep, with pads up to 40 acres, and could cost exponentially more to plug and reclaim." [WyoFile, 06/02/20]

- Average Well Depth Has Steadily Increased Over The Past Seventy Years. "In 1950, well depth averaged about 3,700 feet, and in 2008, it averaged about 6,000 feet. Newer wells may be drilled 10,000 feet vertically." [GAO, 09/18/19]
- Research Has Found There To Be A Very Strong Relationship Between The
  Total Drilling Depth At Any Location And The Total Cost of Reclamation.
  "The national data indicate that the trend toward deeper wells holds true for the
  U.S. as a whole. Although well depth is only one relevant factor affecting the
  reclamation cost of a well, a variety of research has identified a direct
  relationship between well depth and reclamation cost." [Center for Western
  Priorities, 02/18]

Also Significant Were The Changes That WOGCC Put In Place To Address Idle Wells — Under The New Rules Implemented In 2015, Wells Found To Not Be Producing, Injecting, Or Disposing In An Economic Manner May Now Require An Increased Bond Amount.

 Idle Wells Are Those Most At Risk Of Being Abandoned Without Being Properly Plugged And Adequately Reclaimed, And Now Wyoming Ensure That Idle Wells Are Subject To Bonding Requirements That Adequately Reflect That Risk. "Currently we require financial assurance that wells are drilled to the highest safety standards and that they will be competently plugged, abandoned, and site-reclaimed when they no longer produce. The Wyoming Oil and Gas Conservation Commission also requires modest bonds to assure operators clean up and plug wells when their useful lives are over. And we require when a well has not produced for three years (is "idle") the operator must provide a bond (like an insurance policy or a cash guarantee) of \$10 per foot, which can be used by the state to properly plug and reclaim the well if the operator does not do so." [WyoFile, 06/02/20]

• The Implementation of Idle Well Bonds - Which Are Primarily Posted By Smaller Companies - Has Significantly Increased The Total Amount in Bonds That Wyoming Now Holds. "As of July 3, 2023, we held total bonds in the amount of \$335,279,174. Idle well bonding of \$234,757,092, made up about 70% of the total." [WOGCC Supervisor Report to Commission, July 2023]

## Wyoming's Oil Industry Recognized The Importance Of The Updated Bonding Requirements And Did Not Express Concerns With Putting Up Higher Bonds.

The Oil Industry Acknowledged That Operators "Could Live With" The Changes.

The Petroleum Association of Wyoming Didn't Have Concerns About The Increased Bonding Requirements For Oil And Gas Operations On State Lands. "John Robitaille, vice president of the Petroleum Association of Wyoming, which represents the oil and gas industry, said he didn't believe the group would have concerns about the bonding increase." [Wall Street Journal, 09/22/15]

The Petroleum Association Of Wyoming Said The Oil Industry "Could Live With" The Changes. "The Petroleum Association of Wyoming didn't find the changes too objectionable at first blush. 'I'm sure we'll see some people complaining, but overall I think it will be something that we could probably live with,' Petroleum Association of Wyoming President Bruce Hinchey said Friday." [Associated Press, 12/08/15]

Republican Governor Matt Mead Said The Industry Recognized The Changes Were Popular And Necessary To Satisfy The Public.

Republican Governor Matt Mead Said The Oil Industry Recognized That Taxpayers Shouldn't Have to Pay To Clean Up Abandoned Wells And That The Public Wanted Assurance That Public Lands Wouldn't Be Harmed By Wells Left Behind. "I think what we've done effectively is proactively looked at this situation so we don't leave taxpayers holding the bag," Gov. Matt Mead said in an interview. And while industry is struggling, 'they recognize that in order to have the best success in oil and gas, you have to be able to address these things to where the public is satisfied that we're doing our job of being good stewards of the land." [Casper Star-Tribune, 12/08/15]

<u>In The Years Following Enactment of Wyoming's New Bonding Requirements,</u>
It Is Clear That The Updated Regulations Have Not Hurt Wyoming's Oil

## <u>Industry. In Fact, Increased Production From Wells Drilled Under The State's Increased Bond Amounts Has Enabled Production To Reach New Heights.</u>

Oil And Gas Production On State Public Land Increased After The State Improved Its Bonding Requirements— To Its Highest Level In 25 Years.

Wyoming's Bonding Changes Went Into Effect On February 1, 2016. "Effective February 1, 2016, the WOGCC revised its bonding rules to increase the required bond amounts. Now, an individual well bond is ten dollars per foot of length of the well bore and the blanket bond amount covering all wells of an operator is one hundred thousand dollars." [Oil and Gas, Natural Resources, and Energy Journal, September 2016]

By 2018, Oil Production In Wyoming Had Risen To Its Highest Level In 25 Years. "Oil production in Wyoming has risen to its highest level in 25 years. The Wyoming State Geological Survey (WSGS) discovered the increase while updating its online map of oil and gas drilling." [Wyoming Public Media, 06/05/19]

• Natural Gas Production Also Rose. "Natural gas production was also on the rise, with 1.81 trillion cubic feet produced in 2018. New wells accounted for 8% of that production, WSGS said." [Oil City News, <u>06/05/19</u>]

The Record-Setting Production Was Driven By New Wells Drilled Under Wyoming's Updated Bonding Requirements.

New Wells That Were Drilled Following The State's Updated Bonding Requirements Went Into Effect Were Responsible For One-Fifth Of Wyoming State Lands' Record-Setting Production In 2018. "Wyoming produced 88 million barrels of oil in 2018, with new wells contributing over 21% of that production output. The last time oil production was at this level was in 1993, according to the Wyoming State Geological Survey who announced the information on Tuesday, June 4." [Oil City News, 06/05/19]

 Wyoming Saw 599 New Wells Drilled Statewide In 2018 That Helped Drive Production. "It wasn't just increased production from existing wells: one out of every five wells was new. 599 new wells were completed last year. Campbell and Converse counties came out ahead with the most oil production." [Wyoming Public Media, 06/05/19]

Wildcatters, Which Tend To Be Smaller Businesses, Were Also Drilling More Under The New Requirements.

A State Budget Forecaster Noticed Year-By-Year Increases In New Rig Counts In Wyoming In The Years Following The State's Bonding Changes. "Through the first six months of CY 2019, Wyoming oil production is on pace to be the highest annual oil production in at least 25 years – dating back to the early 1990s. The number of active oil

rigs in Wyoming throughout CY 2019 has outpaced rig counts in CY 2018, which in turn were higher than in CY 2017. For example, Baker Hughes GE (BHGE) reports 25 oil rigs active in Wyoming as of September 2019, which compares favorably to the 17 oil rigs reported one year ago." [Wyoming Consensus Revenue Estimating Group State Government Revenue Forecast, October 2019]

In 2018, 599 New Wells Were Completed In Wyoming, Including An Increase In Wildcat Wells. "The WSGS provides annual updates to their Interactive Oil and Gas Map of Wyoming. Data about new oil and gas wells are inputted. 599 new wells were completed in Wyoming in 2018. WSGS says that 235 of these were in traditional fields in Sublette County but that the state and particularly eastern Wyoming is seeing more 'wildcat' wells." [Oil City News, 06/05/19]

Wildcat Drillers Tend To Be Small Businesses. "Wildcatting often involves smaller firms and can involve both high risk and high reward for stakeholders. [...] Another aspect of wildcat drilling involves small producers exploring for oil in fields that have already been fully exploited by larger oil companies. These fields can have sizable pockets of oil reserves that are uneconomic for larger producers due to economies of scale but are still worthwhile for smaller, more agile wildcat drillers." [Investopedia, 04/25/22]

Wyoming's State Budget Forecaster Was So Impressed By Increasing Production And Industry Optimism That It Adjusted Its Five-Year Production Estimate Up By 19 Million Barrels Of Oil.

A Report From The Wyoming Consensus Revenue Estimating Group (CREG) Said Wyoming's Oil Production On State Lands Was "Substantial." "Wyoming oil production in CY 2018 increased by 12.3 million barrels (bbls) (16.3 percent) over CY 2017 levels. Moreover, in the first half of CY 2019 last year's trend line gains have been sustained, increasing 7.1 million bbls over the first six months (17.1 percent). These substantial gains in total Wyoming oil production are achieved against a backdrop of annual year-over-year declines in conventional oil well production since CY 2010."

The CREG Report Found "Optimism" In Public Statements From Oil Companies, And Credited The Industry For Strength In Tax Collection. "The optimism of Wyoming oil production, particularly in the Powder River Basin (PRB), is evident in the statements of publicly traded exploration and production companies operating in the region. Additionally, there are pipeline expansions and conversions that will expand access to markets for Wyoming oil and are responsible for some of the strength in total statewide sales and use tax collections." [Wyoming Consensus Revenue Estimating Group State Government Revenue Forecast, October 2019]

• **CREG Is Wyoming's State Government Budget Forecaster.** "The Consensus Revenue Estimating Group (CREG) is responsible for formulating projections for

the main sources of income to the major accounts in the State. CREG was created by a mutual, informal agreement between the executive and legislative branches in 1983. CREG's purpose is to provide reliable and consistent revenue estimates which are be used by the executive branch and the Legislature in the state's budgeting process." [Wyoming Legislature, accessed <u>07/23/23</u>]

In October 2019, CREG Was So Impressed With The "Upward Production Trend" That It Adjusted Its Five-Year Forecast Up By 19 Million bbs More Than It Had Previously Expected. "CREG expects that upward production trend will continue, albeit at a more conservative pace throughout the forecast period with total production ultimately rising to 111 million bbls, or 19 million bbls higher by CY 2024 than previously forecast in the January 2019 CREG report." [Wyoming Consensus Revenue Estimating Group State Government Revenue Forecast, October 2019]

And It Wasn't Just Development On Existing State Lands Leases That Increased Following Enactment Of Wyoming's New Bonding Requirements – In The Year Following The New Standards Being In Place, Total Annual Revenue Generated From The Sale Of New State Oil And Gas Leases Also Skyrocketed.

In 2016, The Year That The Wyoming Oil And Gas Conservation Commission Enacted Oil And Gas Bonding Reform, Total Bonus Bid Revenue Generated Across All Lease Auctions Held That Year Increased By Sixty Percent Over The Previous Year. In 2015, state oil and gas lease sales generated \$4.5 million in revenue from oil and gas bidders purchasing parcels for lease. In 2016, the year the new state's new bonding requirements were put into effect, revenue from bonus bids increased by sixty percent, to \$7.2 million. [Office of State Lands and Investments, accessed 08/02/23]

The Next Year, Bonus Revenue From State Lease Sales Skyrocketed To Over \$60 Million. In 2017, an entire year following Wyoming's adoption of new bonding requirements for oil and gas operations on state lands, the industry's interest in acquiring new leases soared, resulting in the state generating a total of more than \$60.6 million in bonus bid revenue alone from state oil and gas lease sales. Companies purchased a total of 181,534 acres of state lands for lease at the three auctions held throughout the year, at an average bid of \$334 per-acre. [Office of State Lands and Investments, accessed 08/02/23]

**CONCLUSION:** The updates that the state of Wyoming implemented to its bonding requirements in 2015 were common-sense solutions to address a serious problem -- thousands of abandoned wells were littered across the state, and bond amounts were not enough to cover the enormous bill to clean them up. The Wyoming Oil and Gas Conservation Commission knew the problem would just continue to balloon into the future if the root cause of it wasn't addressed, and so they took appropriate action – including raising the bonds that oil and gas companies pay on their wells to more closely reflect the costs of plugging and reclaiming wells on state lands. The oil and

gas industry said it expected to weather the changes just fine; and in fact companies did even better than fine, with new wells that were drilled under the updated bonding requirements leading to record-setting production in the years following the implementation of the new standards.

Federal public lands are now facing a similar issue, as there are thousands of orphaned wells across the country that have been left unplugged, with the surrounding lands unreclaimed. To protect taxpayers from having to continue to pay to clean up the mess, the Bureau of Land Management has proposed several common-sense solutions to reform the outdated federal bonding system, including raising minimum bond amounts to align with the expected costs of plugging and reclaiming wells on federal public lands. As has already been observed at the state-level in Wyoming, these changes will not hinder the industry's ability to lease and develop in the places where companies have always had an interest in oil and gas, and will instead go a long way towards ensuring oil and gas companies – not taxpayers – are held accountable for cleaning up after they're done using public lands.