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July 30, 2014

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Alaska Department of Natural Resources
Division of Oil and Gas
550 West 7th Avenue, Suite 1100
Anchorage, Alaska 99501

Re: Response To DNR's Request For Input On DNR's Oil And Gas Leasing Regulations.

Dear Director Barron:

The Alaska Department of Natural Resources (DNR), Division of Oil and Gas held a public scoping meeting to solicit input on DNR's oil and gas leasing regulations on June 23, 2014. During this meeting, DNR invited the public to provide written comments related to DNR's existing oil and gas regulations. The following comments respond to this call for input from the public.

We represent most of the independent oil and gas lessees operating in Alaska and have worked on oil and gas issues for years. For the most part, we do not have any issues with DNR's unitization regulations. We do, however, have concerns with the Division's policies. Specifically, we are concerned with new unitization policies that undermine prudent oil and gas development practices.

Put simply, we are not sure why DNR is moving away from a unitization policy that faithfully applies the law and incentivizes investment, drilling, and production on State lands. Our comments provide suggestions on how DNR could change its current practice in order to facilitate responsible resource development on State lands.

I. Comments on DNR's New Unitization Policies

Recent unitization decisions and testimony before the legislature from Director Barron suggest that DNR is attempting to alter unitization policy and effectively limit the use of unitization as a conservation tool. For example, Director Barron's unitization decisions have stated that:

- Unitization is not intended for exploration;[1]

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[1] *See, e.g.*, the Otter Unit and Kenai Loop Unit decisions. In the Otter decision, Director Barron rejected a unitization application because the work plans were "aimed at exploration work" and because "[u]nitization is not necessary where the only commitment is to drill exploration wells." Otter Unit Decision at 11, 14. Director Barron also found that "it is not necessary to form a unit to accomplish the proposed exploration activities as those activities are not different than developing on a lease-by-lease basis." Decision at 12.

- Units can only encompass productive acreage;[2]
- Unit boundaries should grow as the operator drills instead of contracting after a set period of time;[3]
- Unitization is inappropriate when there is a single lessee;[4] and
- Unitization is not necessary for unconventional resource developments.[5]

The change embodied by these decisions and testimony make little sense given that DNR has generally applied unitization policy consistently since Statehood and its unitization decisions have worked well for the State, industry, and the public. There is no compelling reason to deviate from DNR's existing regulations and its longstanding practice.

Unfortunately, DNR has never explained why it is adopting new unitization policies that not only conflict with State law and DNR's longstanding practice, but impede responsible development on State lands. The public and industry deserve an answer.

A. Exploration Units

Several of Director's Barron's decisions have suggested that unitization is incompatible with exploration. Director Barron has also testified before the Legislature that "unitization is not for conducting seismic work."[6] These statements are contrary to State law and over 50 years of

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[2] *See, e.g.*, the Otter Unit, Kenai Loop Unit, Angel Unit, Placer Unit, and Badami Expansion decisions.

[3] *Id.*

[4] See the Otter Unit and Kenai Loop Unit decisions.

[5] *See, e.g.*, Director Barron's Feb. 1, 2013 Senate Resource Testimony at 4:00 pm. The minutes from this testimony capture this exchange: SENATOR BISHOP asked how this model would work for shale. "MR. BARRON: that it really doesn't, because a single well can hold the lease in a conventional sandstone or carbonate reservoir. That is why the tracts are 3 miles by 3 miles and a single well can, in theory, drain the whole tract. Shale is a whole different issue; a single well in a shale zone will never deplete an entire lease. That is exactly why the division instituted quarter-sectioning the leases in the primary shale zone. One can own up to 500,000 un-unitized shale acres and someone could come in and put one well down in every tract and prove that well will flow, have it certified, and retain that tract to the exclusion of everyone else, and never be able to fully develop the oil or gas relative to the size of that tract. So unitization for shale really doesn't work. In fact, you could argue that every well is its own unit in shale, because shale wells drilled next to each other won't even see each other. He held up a chap stick whose diameter represented the 'pour throat' of shale or the area available for oil to flow through, and remarked that a conventional oil play is 10 yards in diameter. That is why unitization in shale becomes very complicated."

[6] Director Barron's Feb. 1, 2013 Senate Resource Testimony at 4:06 p.m.

DNR practice.[7] DNR's unit agreements in place since 1959, as well as the existing model unit agreement, expressly provide that a lessee may form an exploration unit whereby the unit operator commits to "drill to discovery" and then, assuming there is a commercial discovery, move the unit into production.[8] This methodical approach to resource development ensures prudent practices and prevents the drilling of unnecessary wells thereby preventing waste, promoting conservation, and minimizing environmental impacts. Indeed, State policy makers

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[7] This policy decision is also contrary to federal practice. The State's leasing and unitization statutes and regulations are modeled after federal law. The authority to unitize leases in Alaska was first recognized by the Territorial Government. Prior to 1953, territorial statutes provided that the Department of the Interior was to manage oil and gas leases under the Mineral Leasing Act of 1920, as amended, which gave the Secretary the authority to unitize federal leases. In 1953, the Territorial Legislature passed the Alaska Land Act, which set out specific guidelines on oil and gas leasing, created a Department of Public Lands, and tasked this Department with proposing legislation to manage territorial lands. Ch. 126, SLA 1953 at §§ 1, 9, 11. The 1957 amendments to the Alaska Land Act provided that the oil and gas lease provisions managed by the Department of Public Land were to "be in substantial conformity with the provisions of the Mineral Leasing Act of 1920, as amended[.]" Ch. 184, SLA 1957 Art. IX, § 3 (citing 30 U.S.C. § 226). The 1957 amendments also expressly incorporated, by reference, the Mineral Leasing Act's unitization authority. Ch. 184, SLA 1957 Art. IX, § 3 (citing 30 U.S.C. § 226). The first Alaska legislature built on the foundation laid by the territorial government and further refined and augmented the Alaska Land Act. Ch. 169, SLA 1959. With these additions, the first legislature created the DNR to manage the State's oil and gas leases. Of particular import, the 1959 legislation used the same unitization language found in federal law to grant the DNR Commissioner the express authority to unitize State oil and gas leases. Ch. 169, SLA 1959 Art. VII, § 7. Alaska's Unit Agreements therefore cited the Mineral Leasing Act of 1920 as a basis for DNR's authority to unitize. *See, e.g.,* Soldotna Creek Unit Agreement (Oct. 1959). Since Statehood, federal law continued to retain significant influence. In particular, the Alaska Land Act and the Mineral Leasing Act's unitization provisions are nearly identical. *Compare* AS 38.05.180(p) *with* 30 U.S.C. § 226(j). Other provisions within the Alaska Land Act are also modeled after the Mineral Leasing Act. For example, the conditions authorizing lease extensions beyond the primary term in AS 38.05.180(m) and 30 U.S.C. § 226(i) are very similar. Likewise, some of DNR's oil and gas regulations are modeled after federal regulations. *Compare* 43 CFR 3107.1 - .2-3. *with* 11 AAC 83.125-135. Because the Alaska provisions are based on federal law, it is appropriate to look to federal unitization law to better understand scheme"); *see also* 2A Norman J. Singer, *Sutherland Statutory Construction* § 51.01-.02 (5th ed. 1992 the Alaska's unitization laws. *See Underwater Construction, Inc. v. Shirley*, 884 P.2d 150, 155 (Alaska 1994) ("We construe state statutes *in pari materia* with federal statutes when the statutes deal with the same subject matter, and the state scheme relies upon the federal).

[8] *See, e.g.,* Article 9 and 10 of the *Kenai River Unit Agreement* (1959), *South Middle Ground Shoal Unit Agreement* (1967), and *Duck Island Unit Agreement* (1978), and Article 8 of the *Southern Miluveach Unit Agreement* (2011).

have long embraced forming exploratory units "because centralized, unitized operation of an oil and gas field can and usually will result in substantial reduction in the expenses of extracting the resource, and in absolute gains in the total amount of oil and gas recovered."[9]

It is important to clarify that we agree with DNR that unitization is ***not*** for rank exploration. Rather, under DNR's regulations, and consistent with its past practice, a unit may only be formed over an area that contains a reservoir or a potential hydrocarbon accumulation. 11 AAC 83.356(a) provides that a unit "must encompass the minimum area required to include all or part of one or more oil or gas reservoirs, or all or part of one or more potential hydrocarbon accumulations." DNR's regulations define a "potential hydrocarbon accumulation" to mean "any structural or stratigraphic entrapping mechanism which has been reasonably defined and delineated through geophysical, geological, or other means and which contains one or more intervals, zones, strata, or formations having the necessary physical characteristics to accumulate and prevent the escape of oil and gas." 11 AAC 83.395(5).

The definition of potential hydrocarbon accumulation is very similar to federal OCS unitization regulations (30 CFR § 250.50(c)), which were included in DNR's unitization regulation file.[10] The Federal Registry notice for the OCS unitization regulations explains:

> Use of the term 'potential hydrocarbon accumulation' was specifically intended to authorize unitization for exploration by covering the situations where the existence of a potential hydrocarbon bearing geologic structure has been reasonably delineated on the basis of reliable geophysical data, but the existence of a reservoir has yet to be proved.[11]

DNR's regulations also provide that a unit application *must* include a Plan of Exploration (POE) *unless* "a reservoir has become sufficiently delineated so that a prudent operator would initiate development activities in that reservoir."[12] In other words, if a unit applicant has *not* delineated a reservoir, it may submit a POE to explore the unit area.[13] A POE, unlike a Plan of

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[9] AGOPRAR001184 (May 30, 1978 Memorandum from the Director of Research for Legislative Affairs, to Hon. Kay Poland).

[10] The inclusion of the federal regulation in DNR's unitization file suggests that DNR considered this definition when promulgating the State unitization regulations in the early 1980s.

[11] 45 Fed. Reg. 29279, 29283 (May 2, 1980). Federal and State regulations therefore allow for a lessee to form a unit over "any structural or stratigraphic entrapping mechanism which has been reasonably defined and delineated . . . ." *Compare* 11 AAC 83.395(7) *with* 30 CFR § 250.50(c).

[12] 11 AAC 83.343(a). If a reservoir has become sufficiently delineated, then the unit operator must submit a POD that describes (i) proposed development activities and (ii) the lessee's "plans for exploration or delineation of any land in the unit not included in a participating area." *Id.*

[13] 11 AAC 83.341(a).

Development, does not require a commitment to production; a POE merely requires that the unit operator set forth a plan that identifies "the applicant's proposed exploration activities[.]"[14]

Based on the foregoing, it is clearly established in State law, as demonstrated by DNR's longstanding practice, that a unit may be formed over a resource play that has not been delineated as a reservoir – allowing and promoting exploration is a recognized purpose of unitization. Accordingly, exploration, properly understood, is authorized by DNR's unitization regulations and DNR has the authority to form units for the purpose of exploring potential hydrocarbon accumulations. Moreover, allowing exploration acreage to be included in a unit promotes conservation, prevents waste, and will result in more drilling and investment.

B. Units Should Always Include More Than Productive Acreage

Unfortunately, recent unitization decisions indicate that DNR will only form units over productive acreage.[15] This is a new policy direction that contradicts DNR's regulations and past practice. Worse, these decisions undermine the principal purposes of unitization: the conservation of resources and the prevention of waste.

DNR's regulations have long provided that the unit "must encompass the minimum area required to include all or part of one or more oil or gas reservoirs, or all or part of one or more potential hydrocarbon accumulations." 11 AAC 83.356(a). Then, "ten years after sustained unit production begins, the unit area must be contracted to include only those lands then included in an approved participating area and lands that facilitate production[.]" 11 AAC 83.356(b).

Director Barron's decisions read out of existence this regulation, which has been faithfully implemented by DNR for decades, in favor of a policy that only allows a lessee to form units around productive acreage. That is, instead of seeing units collapse over time, Director Barron seems to be pursuing a policy where he wants to see units grow as the lessee drills on the outer periphery of the unit.

This approach is impracticable, will result in waste, and, ultimately, less drilling and production; companies are simply not going to spend the capital exploring and delineating lands without knowing whether the lands are held by a unit.

Moreover, Director Barron has never explained why the process set out in DNR's regulations is contrary to the public interest. This process has worked well for years, to the benefit of the State, the public, and the State's lessees.

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[14] *Id.* Obviously, the purpose of POE is to explore the unitized area.

[15] *See* Angel Unit Decision, Otter Unit Decision, Kenai Loop decision, Badami expansion decision.

C. Unitization is Compatible with a Single Lessees

DNR's recent decisions and statements by Director Barron express the belief that unitization is improper when only a single lessee is involved. Once again, this is a policy direction that conflicts with DNR's longstanding practice.[16] Indeed, a June 3, 1975 Attorney General's Opinion expressly provides that State law authorizes a single lessee to form a unit if the lessee can demonstrate that unitization is necessary for conservation purposes, to prevent waste or to minimize environmental impacts.

Nevertheless, Director Barron has issued several decisions where he states that "it is not necessary to form a unit to accomplish the proposed exploration activities as those activities are not different than developing on a lease-by-lease basis."[17] This finding can apply to most units – all exploration *could* be done on a lease-by-lease basis. The issue, however, is whether such an approach is consistent with the objectives of unitization.

As set out in 11 AAC 83.303, unitization is designed to prevent economic and physical waste, conserve resources, maximize recovery, and minimize surface impacts. Lease-by-lease exploration and development is contrary to all of these objectives. That is, after all, why DNR's regulations permit exploration units.[18]

Unitization, regardless if there is one lessee or multiple lessees, is necessary to allow the unit operator to rationally explore and develop a structure or stratigraphic play based upon sound geological, reservoir, engineering, and commercial considerations, rather than drilling wells in locations and sequences intended to hold acreage nearing expiration. After all, some reservoirs are susceptible to formation damage and sensitive to both drilling and completion practices. Thus, unitization allows a single lessee to propose a drilling plan that elevates sound geological and reservoir engineering practices over a plan that would pick drilling locations to hold expiring leases.

Moreover, unitization will almost always minimize surface impacts because it will allow for coordinated development.

Not surprisingly, the foregoing perspective for why unitization is preferred to lease-by-lease development is consistent with DNR's longstanding practice. For example, the Division has issued decisions which state that combining leases in a unit "that overlie a reservoir and potential hydrocarbon accumulations . . . increases the likelihood that these leases will be

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[16] *See* Otter Unit and Kenai Loop Decisions; *see also* Director Barron's Feb. 1, 2013 Senate Resource Testimony at 4:06 p.m. ("unitization doesn't work really well for single owners, because it is a contract and it is for the single owners").

[17] Otter Unit Denial at 12.

[18] 11 AAC 83.341.

developed jointly with acreage . . . thereby reducing surface impact from development."[19] The Division has also repeatedly found that "Unitization, with development occurring under the terms of a unit agreement, can promote efficient evaluation and development of the State's resources, and minimize impacts to the area's cultural, biological, and environmental resources."[20] It is practically self-evident that forming a reasonably sized unit that encompasses a potential hydrocarbon accumulation will increase the likelihood that these hydrocarbons will be developed jointly and efficiently and, consequently, advance the purposes of unitization.

Unfortunately, Director Barron has repeatedly rejected a rational development strategy in favor of one that requires wasteful expenditures that could force companies to drill to hold acreage instead of prudently and responsibly exploring and developing.

In sum, Director Barron's preference of lease-by-lease development is contrary to DNR's longstanding practice and 11 AAC 83.303, which is intended to ensure that exploration and development plans focus on prudent expenditures so that the resource can be properly developed in a manner that minimizes economic waste, ensures the unit operator makes optimal engineering decisions, maximizes recovery, and minimizes surface impacts. Director Barron's finding, favoring lease-by-lease development, is yet another example of the Division pursuing policies that are contrary to State law and the Parnell Administration's directive to partner with industry to ensure timely and responsible resource development.

D. DNR's Unit Denial Decisions Often Fail to Take Into Account the Interests of Lessees

When making a unitization decision, DNR is required to take into account the interests of all parties in interest, including the lessee. 11 AAC 83.303(a)(3). DNR's regulations, and its longstanding practice, recognize that unitization decisions must focus on the mutual interest of the State, the public, and industry because this is the best way to (i) ensure continued drilling on State lands and (ii) create a climate the invites investment.

Recent unit decisions, however, often downplay or simply ignore the lessee's interests. Very little consideration is given to how a unit denial impacts a lessee's ability to raise capital or how such denials impede the ability of lessees to pursue exploration or development projects. These decisions also fail to take into account how the lessee applying for the unit often has the best knowledge of area and is best placed to know how to proceed with timely and prudent drilling operations within the area proposed to be unitized.

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[19] Director's March 15, 2013, *Approval, In Part, of the First Expansion of the Badami Unit*, Decision at 5.

[20] Director's October 28, 2011, *Approval, In Part, to Form the SMU* at 14.

We understand, and share, DNR's legitimate concerns about companies "warehousing" acreage and following through on work commitments. These concerns can be addressed by well drafted unit agreements that promote and drive actual exploration and development activities and not by the refusal to form units, which accomplishes neither objective.

E. DNR Has the Authority to Form Unconventional Resource Units

As quoted above, Director Barron has stated that unitization is likely improper for unconventional resource plays. This statement conflicts with DNR's past practice where it formed the Pioneer Unit to allow for the exploration and delineation of coal-bed methane. The decision approving this unit offers a compelling rebuttal to Director Barron's new position that DNR likely should not or will not form units for unconventional resources.

Not only does DNR have the authority to form unconventional units, but unitizing unconventional resources furthers the purpose of the Alaska Land Act because it protects the public interest and meets all of the regulatory criteria for unitization. Combining shale leases under a unitization agreement achieves all of the important policy goals mandated by State law because it minimizes the number of facilities required for development if a commercial discovery is made; encourages rational design and use of production, processing, and transportation facilities without regard to individual lease ownership; maximizes the recovery of oil and gas; prevents economic and physical waste; provides for the equitable sharing of costs and revenues associated with exploring and developing the unit area; and results in timely development and production.

This section discusses the reasons why DNR should embrace the unitization of shale leases.

1. State Law Authorizes DNR to Form Shale Units

There is no express statement in State law addressing whether DNR has the authority to form unconventional units. That said, under DNR's regulatory authority, the threshold requirement for unit formation is the presence of a reservoir or potential hydrocarbon accumulation underlying the proposed unit area.[21] Geophysical data can show the existence of unconventional reservoirs or potential hydrocarbon bearing geologic structures. Thus, State law authorizes the unitization of unconventional resources if an applicant supplies data demonstrating the existence of a reservoir or a potential hydrocarbon accumulation in the proposed unit area.

Nothing in State law suggests that DNR's unitization authority only extends to conventional hydrocarbon resources. Unitizing unconventional hydrocarbon resources unquestionably furthers the objectives of the Alaska Land Act for the same reasons as unitizing

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[21] AS 38.05.180(p) and 11 AAC 83.356(a).

unconventional resources: unitization enables the rational development of the resources in an efficient manner that conserves resources, reduces waste, minimizes environmental impacts, and maximizes ultimate recovery.

And DNR's past practice confirms that State law authorizes the unitization of unconventional resources. For example, DNR unitized coal bed methane leases covering over 72,000 acres after concluding that the "unit operator has demonstrated that a legitimate geologic prospect, which may contain one or more commercially viable oil and gas accumulations, underlies the proposed unit area."[22]

2. *Unitizing Shale Leases Is Necessary to Protect the Public Interest.*

Under 11 AAC 83.303, the unit applicant must show that unitization is necessary or advisable to protect the public interest.[23] When evaluating whether a proposed unit agreement is in the public interest, DNR considers the criteria set out in 11 AAC 83.303(a) – *i.e.*, whether unitization will promote the conservation of all natural resources, promote the prevention of economic and physical waste, and protect all parties in interest.

As discussed above, DNR has long recognized that unitization of leases overlaying a common reservoir or potential hydrocarbon accumulation as a prudent conservation mechanism.[24] "The integration of interests that accompanies unitization provides the most practical method for maximizing oil and gas recovery, while minimizing negative impacts on other resources."[25]

With shale leases, unitization will allow for coordinated development of multiple hydrocarbon zones, *e.g.*, gas from the Shublic reservoir can be used to maximize the recovery of shale oil from the HRZ reservoir. Unitization also allows for coordinated use of infrastructure and for joint development in an orderly and rational manner over a wide geographic area. Thus, coordinated development will conserve resources and facilitate the greatest ultimate recovery of those resources.

In contrast, without unitization, the unregulated development of reservoirs can result in waste caused by unnecessarily dense drilling, an increase in environmental damage caused by the concentration of surface activity, and the inefficient duplication of production, gathering, and processing facilities.[26]

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[22] *Pioneer Unit Agreement, Decision and Findings of the Commissioner,* March 31, 1998 at 7.

[23] AS 38.05.180(p).

[24] *See, e.g., Pioneer Unit Agreement, Decision and Findings of the Commissioner.*

[25] *Id.* at 10-11.

[26] *Id.*

Formation of an unconventional unit prevents economic and physical waste because the unit operator must have an equitable cost sharing formula and a coordinated development plan. This in turn lessens environmental and cumulative impacts because an equitable cost-sharing agreement promotes efficient development of common surface facilities and operating strategies by allowing lessees to rationally decide well spacing requirements, injection strategies, and the proper location for common, joint-use surface facilities.

Unitization also prevents economic waste by eliminating redundant expenditures through the adoption of unified exploration and development plans. Rejecting an unconventional unit in favor of lease by lease development will, in contrast, cause waste because it will result in uncoordinated development that increases environmental impacts, costs, and competition over infrastructure, gravel, roads, and facilities.

Unitizing shale leases will also prevent physical waste[27] by allowing for a coordinated reservoir management strategy.[28]

Unitizing shale leases protects all parties in interest, including lessees, the State, the public, subsistence users, and local residents. Unitization advances the State and lessees' economic interests because it improves the economics of the project. DNR has long understood that an operator "would not produce marginal economic reserves on a lease by lease basis, but would produce them through unitized operations" because facility consolidation saves capital and promotes better reservoir management.[29] The same logic applies to shale leases. Thus, unitizing shale leases will benefit all parties in interest because it increases the likelihood of developing shale reservoirs with variable productivity across adjoining leases.

Unitizing unconventional shale leases promotes the interests of the State and lessees because it increases the probability that an operator can raise sufficient capital to drill the necessary test wells. Investors are less likely to invest in shale exploration if an operator cannot

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[27] AS 31.05.170(15) defines waste to include: the inefficient, excessive, or improper use of, or unnecessary dissipation of, reservoir energy; the locating, spacing, drilling, equipping, operating or producing of any oil or gas well in a manner which results or tends to result in reducing the quantity of oil or gas to be recovered from a pool in this State under operations conducted in accordance with good oil field engineering practices; the inefficient above-ground storage of oil; the locating, spacing, drilling, equipping, operating or producing of an oil or gas well in a manner causing, or tending to cause, unnecessary or excessive surface loss or destruction of oil or gas; producing oil or gas in a manner causing unnecessary water channeling or coning; the operation of an oil well with an inefficient gas-oil ratio; underground waste; the drilling of wells unnecessary to carry out the purpose or intent AS 31.05.

[28] *See, e.g., Pioneer Unit Agreement, Decision and Findings of the Commissioner,* at 11.

[29] *Id.*

demonstrate that the leases will be preserved even if it is not drilled within the primary term – *i.e.*, most investment dollars are premised on continuing development for an extended period. Indeed, one of the primary reasons why DNR unitized coal bed methane leases in the late 1990s was because the agency understood that without unitization this unconventional prospect would not be explored and developed; DNR therefore concluded that unitization was the best way to test the economic feasibility of coal-bed methane gas.[30] Thus, unitization enables lessees to more easily raise the capital necessary to efficiently test the concept of shale development.

Based on the foregoing, unitizing shale leases will accelerate the appraisal of the resource. If the unit operator makes a commercial discovery, it will also stimulate the State's economy from the production based revenue, oil and gas related jobs, and service industry activity. Thus, unitization advances the State's economic interests in seeing State resources explored and developed in a timely manner.

Unitization is also in the State's conservation interests because it fosters efficient exploration and development of the State's resources by a single operator over a large area while minimizing impacts to the region's cultural, biological, and environmental resources. By reducing the amount of land and fish and wildlife habitat that would otherwise be disrupted by individual lease development, the environment is better protected and there is less potential for interference with subsistence activities.

Finally, forming shale units protects all parties in interest because it will increase the probability of securing federal, State, North Slope Borough and tribal government approvals because the applicant can demonstrate a rational and efficient exploration and development plan over a wide area that lessens environmental impacts and reduces surface conflicts with subsistence and other surface users. In contrast, refusing to unitize shale will create the wrong incentives – it could force lessees to act in an irrational manner by drilling unnecessary wells just to hold onto leases. Lease by lease development will also increase commercial disputes between parties over road access, gravel, pipelines, and facilities.

3. *Arguments Made Against Unitizing Unconventional Shale Leases Are Misplaced.*

As described above, Director Barron indicated that unitization is not a proper mechanism to manage shale exploration and development. These objections are misguided.

Concerns have been raised that unitizing shale leases would result in a land grab and the "warehousing" of State resources. This view overlooks the fact that unit agreements can be structured to prevent this outcome. For example, DNR routinely approves unit agreements conditioned on timely development with sanctions imposed if these development milestones are not achieved. If a unit operator fails to perform, the unit may automatically contract or terminate.

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[30] *Id.* at 9.

Further, DNR has considerable discretion on the size of the unit area it will approve. Thus, the amount of acreage included within a unit is largely within DNR's discretion.

Objections have also been made based on a new view at DNR that unitization is only appropriate for proven reservoirs. This view directly conflicts with State law described in detail above. It is also inconsistent with DNR's past practice. For example, UNOCAL's Pioneer Unit Agreement proposed a 5-year exploration plan that committed to exploration activities designed to determine the aerial limits, total net pay thickness, reserves, and economic viability of producing coal bed methane. For this initial exploration program, UNOCAL divided the unit area into four exploration blocks, and committed to drilling wells in each block. If UNOCAL failed to drill and test a block by a particular date, that block would be contracted from the unit.

DNR found that UNOCAL's initial exploration plan made sense because: "Coal-bed methane is an unconventional energy source. The only way to determine the economic feasibility is to production test the coal seams. The costs of producing the gas and disposing of the produced water along with a determination of the bottom hole pressure, reservoir continuity, and relative permeability will determine the economic viability of producing coal-bed methane."[31] This same logic applies to shale leases.

As the decision approving the Pioneer Unit demonstrates, unitization is the best way to test an unconventional resource and allow for orderly development in a timely, efficient, and responsible manner despite the fact that UNOCAL, if successful, would have to apply for many small participating areas.[32]

There is also a perception that unitizing shale leases will lessen competition. This view overlooks the fact that successful development, which will likely only occur if DNR forms units, will undoubtedly increase interest in shale development on the North Slope and likely attract new companies investing in Alaska upon seeing the concept work.

In short, what we would like to see is DNR forming units consistent with its statutes and regulations and its longstanding past practice. After all, for the past 50 years unitization has allowed for the industry to develop State lands in a rational and methodical manner that promotes conservation, minimizes waste, limits environmental impacts, and results in the greatest ultimate recovery of the resource.

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[31] *Pioneer Unit Agreement, Decision and Findings of the Commissioner* at 8.

[32] DNR explained that UNOCAL would have to form many participating areas "Due to the geologic uncertainty concerning the relationship between structural position verse coal bed distribution and overall coal quality, and the ability to economically produce coal-bed methane gas, the coal-bed methane participating areas may be many and relative small."

F. Unintended Consequences of Ignoring Existing Unitization Regulations and Longstanding Unitization Practices

We are very concerned that DNR's new unitization policies, which are ostensibly intended to encourage development, will end up stifling investment and will create perverse incentives to drill "dumb wells" just to preserve leases. Underlying this new policy appears to be a misguided focus on trying to ensure rapid develop of particular leases instead of allowing lessees to operate in a prudent manner by making investment and drilling decisions based on the geology and surface limitations.

It also appears that DNR's decisions fail to consider how taking unitization in a new direction adversely impacts the ability of independent companies to raise capital for their projects. DNR does not appear to appreciate that many of the new lessees in this State must raise capital for their projects. To do this, they generally need to (i) secure a land position; (ii) have a portfolio of assets; and (iii) sufficient time to rationally and logically develop resources.

II. Proposed Regulatory Changes

As discussed at length above, we believe DNR's regulations, properly understood, are not in need of significant modifications. We believe the Director should have broad discretion to implement the regulations consistent with the purposes of unitization and that imposing regulations that are too prescriptive may have unintended consequences. That said, we do propose several regulatory changes for two reasons. *First*, some of the decisions seem to be in conflict with DNR's regulations (e.g., 11 AAC 83.356(a) and (b)), we would like regulations that provide more clarity and guidance. *Second*, potential investors and prospective lessees would benefit from new regulations that provide more clear guidance on the "rules of the road."

To this end, we would suggest promulgating regulations that clarify DNR authority in the following areas:

- Unit acreage may contain acreage that is not proven to be productive if sufficient data suggests that resource potential underlies the unitized acreage;
- Unitization is compatible with exploration activity;
- A Plan of Exploration can be filed with a unit application – thus a unit can be formed even if acreage is not sufficiently delineated to be placed onto production;
- Unconventional resources like shale can be unitized;
- DNR may condition the approval of a unit on the completion of certain work commitments with the failure to complete the work resulting in automatic termination of the unit or the contraction of acreage out of the unitized area, without the need for judicial action;
- Decisions must take into account prudent development practices – geology and conservation should determine work commitments not lease boundaries;
- A single lessee or working interest holder may unitize acreage.

Thank you for allowing us to provide comments on this important topic.

Sincerely,

Crowell & Moring LLP

Jonathan W. Katchen