Data Submitted (UTC 11): 2/20/2019 11:00:00 AM
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Title: Vice President
Comments: Dear Mr. O'Donnell:

The North Dakota Petroleum Council (NDPC) appreciates the opportunity to offer comments to the United States Forest Service (USFS) Dakota Grasslands as it proposes a Development Supplemental Environmental Impact Statement (EIS). As the federal agency tasked with the important duty of managing the Dakota Prairie Grasslands (DPG) within the State of North Dakota, the Forest Service is in the crucial position of revising procedures for the benefit of all those it serves.

In the 14 years since the previous analysis was completed there has been new information and changed circumstances that warrant environmental analysis to see what, if any, changes need to be made to the DPG's and the Bureau of Land Management's (BLM) decisions about oil and gas leasing and whether or not there is a need to change DPG's Land and Resource Management Plan direction relative to oil and gas development on the Little Missouri National Grassland unit of the Dakota Prairie Grasslands.

The NDPC commends the Forest Service's initiative toward National Environmental Policy Act compliance efficiency, especially in consideration of Executive Order (EO) 13783. EO 13783 was issued March 28, 2017 and directs federal agencies to review all existing regulations, orders, guidance documents, policies, and any other similar agency actions that potentially burden the development or use of domestically produced energy resources, with particular attention to oil, natural gas, coal, and nuclear energy resources. In response to EO 13783, the Forest Service reviewed agency actions, assessed the burdens of those actions on energy resource development, and issued a final report summarizing the agency's recommended steps to alleviate or eliminate any unduly burdensome agency actions. The NDPC would also like to see unduly burdensome agency actions cut to a minimum resulting in less wasted dollars at the USFS and more resources going to things that matter such as conservation. The NDPC thinks the USFS preference for proposed Alternative #3 fails to comply with EO 13783 by creating burdensome regulations for our industry while failing to recognize substantial progress being made in technology used in oil extraction, which creates a far less impact than in the past operations.

1. About The North Dakota Petroleum Council and Our Interest

The NDPC is a trade association representing more than 500 companies involved in all aspects of the oil and gas industry, including oil and gas production, refining, pipeline, transportation, and storage, as well as mineral leasing, consulting, legal work, and oil field service activities in North Dakota, South Dakota, and the Rocky Mountain Region. Established in 1952, NDPC's mission is to promote and enhance the discovery, development, production, transportation, refining, conservation, and marketing of oil and gas in North Dakota, South Dakota, and the Rocky Mountain region; to promote opportunities for open discussion, lawful interchange of information, and education concerning the petroleum industry; to monitor and influence legislative and regulatory activities on the state and national level; and to accumulate and disseminate information concerning the petroleum industry to foster the best interests of the public and industry.

North Dakota has become a major energy state in the United States, second only to Texas in oil production, and NDPC members produced 98% of the oil and gas in North Dakota. North Dakota produces approximately 350 million barrels of oil per year and 400 billion cubic feet of natural gas per year. Of the approximate 14,300 wells currently producing in the state, 907 have a surface location within land controlled by the Forest Service - the Little Missouri National Grassland. Wells tapping into Federal mineral acres number 762, and those extracting from private mineral acres stand at 145. Between January 2005 and August 2017, nearly 230 wells have been drilled within the Little Missouri National Grassland. As a representative of over 500 companies involved in all

aspects of the oil and gas industry, and in the interest to the North Dakota Public, NDPC would like to take this opportunity to give crucial testimony on the proposed changes made in the USDA Forest Service Northern Great Plains Management Plans Revision Draft Supplemental Environmental Impact Statement for Oil and Gas Leasing (hereinafter "the Draft EIS"). NDPC strongly urges the USFS to consider significant evidence which points to Alternative #1 as the best option for the environment, North Dakota people, the energy industry, and the State and Federal Governments. As shown below in this report, the evidence overwhelmingly points to a "site-specific" mitigation approach consistent with other similar EIS's congruent with Alternative #1. NDPC cautions against adopting new or revised lease stipulations provided in Alternative #3 unless supported by substantial record evidence demonstrating a clear and unequivocal need, and that such measures will be effective in meeting the desired outcome.

NDPC acknowledges the importance of improving environmental stewardship and is principally the reason why NDPC requests that USFS adopt Alternative #1 instead of 2 or 3. Alternative #1 is the most appropriate action for the USFS to take and, in fact, the only supportable choice on this record. The 'broad brush' approach taken in Alternative #3 applies stipulations that are rigid and inflexible, creating undue burden to our developers.

NDPC would also like to point out that "Site Specific" mitigation allows for the best environmental and production outcomes, creating a win-win situation. Alternative #3 stipulations present strict, "one-size-fits-all: regulations on operations versus what should be site-specific requirements. Our members are in a competitive market and overly burdensome lease stipulations would cause incentivization for our members to mobilize capital elsewhere, particularly dangerous if they were to choose other states. This would cause hardships in state funding, as per the 2018 tax study, 50% of all taxes collected by the State in the past 5 years have been collected from oil extraction and production taxes.1 (1 Tax Study informational website: https://taxstudy.ndenergy.org/TaxStudy)

ii. Technological, Operational, and Regulatory Advancements Support Lease Stipulations in Alternative #1

Considering EO 13783, NDPC provides information of our industry's continued technological advancements made in oil extraction which benefits the environment by reducing surface area impacts. One of said advancements is the development of horizontal drilling (also called directional drilling). This procedure allows multiple wells to be drilled on a single well pad. In the past, vertical drilling was predominant, only one well per well pad placed as often as every 40 acres, impacting up to 10 or 12 percent of the surface area. The advancements in technology in horizontal drilling permits up to 28 wells on a single well pad, producers recover more oil using fewer wells and less than .5 percent of the surface area in North Dakota.2 (2 See website for more details: https://energyofnorthdakota.com/home-menu/how-oil-is-produced/horizontal- drilling/) Thanks to multi-well pad development, the average impact per well is 1.0-1.25 acres rather than 5 acres. The 5-year impact will be on the order of 310-390 acres rather than 1,550 acres (DEIS at 53).

Multi-well pad development provides a myriad of benefits such as development of on-lease and off-lease minerals, connecting "stranded" oil and gas wells that are not connected to gas gathering, and connection to existing gathering systems for oil, gas, and produced water. In permitting development projects, drilling units commonly encompass multiple lease tracts that would be unfairly affected by the NSO and timing restrictions. These options are severely hindered by inflexible lease stipulations and administrative policies that seek to push development off existing well pads and onto adjacent landowners. Lease stipulations and administrative policies that discourage or eliminate the benefits of this new technology are contrary to the stated objectives of the USFS and many other stakeholders. As shown in the graphic on page 4, this advancement in technology has created an unprecedented use of land while still growing the benefits.

Image in attachment

The benefits and possibilities due to technological advancements, as seen above, in the industry are a good thing for all parties involved and creating regulations that would slow that down or hinder the use of these

technological advancements is ineffective. These regulations are ineffective in their cause of the unmentioned effects which produce hindrances and harm to environmental stewardship while hurting stakeholders. In light of these technological advancements, NDPC requests that USFS consider the side- effects (above mentioned) caused by Alternative #3 from the industry's perspective. The consequences of Alternative #3 would result in a larger impact to the environment and natural resources as compared to Alternative #1. This cannot be overstated. The entire reason for these changes is to reduce impacts to the environment and to natural resources, and if these facts are not taken into consideration then the purpose is rendered utterly useless and will cause undue harm to the environment, our members, both levels of government, and to the people of North Dakota.

In addition to the above evidence, the DEIS in Alternative #3 places much of the burden on NDPC members by the USFS with these applications aimed at moving disturbance off USFS lands onto adjacent landowner's property. Our members believe that cooperation and collaboration with all landowners is vital to preserving the greater LMNG area and diligently consider every request to relocate development wherever possible. Current stipulations and our members demonstrated the practice of working with all landowners provides flexibility to consider alternatives. Restrictive NSO and timing stipulations removes a mechanism of collaboration among multiple surface estates when designing multi-well pads. This will have the unintended consequence of splintering development to a more impactful model rather than enabling the continuance of new methods of oil and gas development in the LMNG. These stipulations, in short, will cause more well pads to be created instead of using already standing and functioning well pads and again create more environmental impact as well as cut oil benefits to the region.

The NDPC is not asking that there be no stipulations or for an unreasonable reduction of regulations, instead we seek a balanced approached considering all information. There are many lease stipulations that are enumerated in Alternative #1, DEIS at Appendix A, and additional lease notices as well as numerous regulatory considerations imposed by agencies at the state of North Dakota that support the conservation objectives of the USFS while enabling its policy to facilitate oil and gas development on public lands (DEIS at 21, 22). The North Dakota Industrial Commission has promulgated "Area of Interest" policy specifically for the Little Missouri River, the Little Missouri River National Grasslands, Elkhorn Ranch, and the Theodore Roosevelt National Park; the North Dakota Department of Health regulates air and water quality matters in compliance with EPA regulations; and the North Dakota Industrial Commission further regulates operational, safety, and pollution control at oil and gas development sites. NDPC's members comply with numerous existing multi-agency rules, regulations, lease notices, lease stipulations, conditions of approval, and numerous best management practices coupled with evolving and improving oil and gas operating practices. These practices are truly reducing the impact of oil and gas development on the LMNG.

Since the last EIS (2008) and the Reasonably Foreseeable Development Scenario (RFDS) of 2013 (updated 2017), the patterns and nature of oil and gas development in the LMNG and the nature of their operations is reducingthe anticipated impacts, contrary to the Purpose and Need as stated in the DEIS. New operating practices in the LMNG seek to reduce truck traffic by use of in-field waste management and connection to existing gathering systems for oil, gas, and produced water. Lease stipulations and administrative policies that discourage or eliminate these options are contrary to the stated objectives of the USFS and many other stakeholders. Multi-well pad development and use of existing well sites where possible, as well as dramatically reducing well pad sites, has the added benefit of connecting "stranded" oil and gas wells that are not connected to gas gathering. In other words, Alternative #3 would create more flaring, making it extremely difficult if not impossible to connect new operations to existing gas pipelines. New facility designs and operating standards have substantially reduced fugitive emissions. Capturing older wells and facilities with new development is a demonstrated benefit to the LMNG.

To summarize the above information, the effects of the stipulations proposed under Alternative #3 are in direct contradiction to the Purpose and Need as stated in the DEIS. The unweighted outcome of adopting the DEIS

under Alternative #3 would adversely affect the desired outcome of preserving the LMNG by not allowing for oil and gas companies to solve the issues brought before them in the most appropriate way possible for each site, as currently allowed under the "site-Specific" Alternative #1, and prevent oil and gas companies from collaboration among multiple surface estates when designing multi-well pads and using current structures already in place. This creates more infrastructure such as roads, gathering and transitionary structures, and well pads and limits the ability to do what is best not only economically for stakeholders, but what is environmentally best.

iii. The Draft EIS Does Not Support Making Changes to the Current Oil and Gas Stipulations

The Draft EIS does not reasonably make it clear why changes or revisions are needed. NDPC and its members simply ask the question, "Why are these changes necessary?" Especially at a time in which the oil and gas industry are making advancements in technology proven to be less impactful than what was previously thought.

We cite the below mentioned cases to support our query, that the agency must also put forth sufficient data to justify the need for the proposed action. See Audobon Naturalist Society of the Central Atlantic States, Inc. v. U.S. Dep't of Transp., 524 F.Supp.2d 642, 665 (D. Md 2007) (DOT engaged in a broad interagency collaborative process, with over 100 representatives from local, state, and federal agencies resulting in several refinements to the purpose and need statement); see also Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664, 670 (7th Cir. 1997) ("The federal agency cannot ram through a project before first weighing the pros and cons of the alternatives."); see also Hodges v. Abraham, 300 F.3d 432, 445 (4th Cir. 2002) (In reviewing an agency's efforts to comply with NEPA, the Court must examine whether the agency took a "hard look" at a proposed project's environmental effects before acting). See also Hughes River, 165 F.3d at 288 (citing Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 377 (1989). (An agency takes a "hard look" when it "obtains opinions from experts outside the agency, gives careful scientific scrutiny, and responds to all legitimate concerns that are raised.")

To support the purported "need," the Draft EIS relies on an updated reasonably foreseeable development scenario ("RFDS") (Hanna 2017). Neither the RFDS nor the Draft EIS, however, conclude that impacts to resources since 2008 have grown worse or otherwise necessitate a change from current conditions. In fact, the RFDS acknowledges that improvements in operational practices have actually decreased resource impacts.

For example, the RFDS states that new technology "eliminates the need to drill as many wells" and "allow[s] multiple wells to be grouped on a single pad" which "can reduce the overall number of pads, roads, pipelines and tank batteries needed to access multiple locations." RFDS at 8. The RFDS makes no other mention of the benefits these improvements have created, nor does the RFDS factor in the potential for decreased resource impacts due to these improvements, even in the face of increased future development. See generally, id; see also DEIS at 125 (acknowledging that multi-well pads are "more prevalent" and "expected to be part of the development of most wells" in the future). Instead, the record remains singularly focused on the volume or pace of future estimated development, which remains relatively limited and uncertain.

The stated purpose of the analysis is "to determine whether current oil and gas lease stipulations and lease notices are providing protection to resources on the [LMNG] on those lands previously determined to be administratively available for leasing." DEIS at 5. The stated need is "because the pattern of development and type of operations have changed since the final environmental impact statement was written and since the most recent review in 2008." Id. Aside from a few passing statements in the Draft EIS, the record is devoid of meaningful discussion about how or why the purported change in "the pattern of development and type of operations" in the LMNG over the past decade has increased impacts or warrants further restrictions. Whereas, in reality, these technological changes and improvements have decreased impacts.

As previously mentioned, it is clear that the Draft EIS has not fully considered the RFDS and the evidence

showing the reduced, not equal, not increased, but reduced impact on the environment with the existing stipulations of Alternative #1. NDPC urges the USFS to choose Alternative #1. Alternative #3 ignores these harmful effects and fails to take into consideration the full impact of the decision.

The Draft EIS cannot conclude without assessment of the indirect effects that any anticipated benefit(s) from Alternative #3 outweigh potential adverse effects or that the proposed changes in Alternative #3 will improve conditions or meet their intended objectives. In short, the environmental consequences of the new/revised lease stipulations have not been fairly evaluated. See e.g. Robertson v. Methow Valley Citizens Council, 109 S.Ct. 1835, 1847 (1989) (holding that NEPA requires "mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated"); see also Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, (9th Cir. 1998) ("General statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided).

iv. Alternative #3 Creates Unneeded Stipulations Which Are Inflexible and Should Only Be Used If Necessary

Stipulations set forth per Alternative #3 create inflexible broadly applied regulations to every leasing operation. This is a clearly ineffective and inefficient way to develop leases, creates undue burden to the developing companies and is a more impactful model of development to the environment. Restrictive lease stipulations should be used sparingly and only where the record evidence demonstrates new lease stipulations are necessary and will be effective in mitigating environmental impacts without unduly restricting oil and gas development. Oil and gas developers are already required under standard lease terms to minimize adverse impacts to air, water, and land, visual, cultural, and biological resources, and other land uses or users and "insure protection and legal compliance for previously unknown resources such as threatened or endangered species or cultural resources." DEIS at 13. Adding more lease stipulations will just add more complications in developing leases on top of making no difference in mitigating environmental impacts.

In NDPC's experience, it is far more effective to address impacts at the individual permitting stage. The Draft EIS acknowledges that individual permitting decisions and conditions provide "additional protections" during lease development and may be more carefully crafted to incorporate design features on a site-specific basis. See DEIS at 9. This same site-specific approach has been upheld, and in fact, encouraged by the courts. Most recently, in San Juan Citizens Alliance v. BLM, 326 F.Supp.3d 1227, 1245 (D.NM 2018), the court, citing a prior decision by the Tenth Circuit, noted "in order to work [an oil and gas lease], the lessee must submit site-specific proposals to the Forest Service and BLM who can then modify those plans to address any number of environmental considerations. Each action is subject to continuing NEPA review." The court went on to note that "[w]hen an APD [] is submitted, BLM then has a concrete, site-specific proposal before it and a more useful environmental appraisal may be undertaken." Id. These site-specific review procedures will continue to provide the necessary protections in the LMNG. Thus, absent a showing that current conditions are insufficient and Alternative #3 is necessary, which simply is not present on this record, the USFS should move forward with Alternative #1.

v. Air Quality

Regarding Air Quality, BLM has no authority to promulgate regulations unless those regulations can be "independently justified as waste prevention measures" under the Mineral Leasing Act.3(3 Order on Motions for Preliminary Injunction, Wyoming v. United States Dep't of the Interior, No. 2:16-CV-0280- SWS, 2017 WL 161428, at *9(D. Wyo. Jan. 16, 2017).) However, NDPC believes it is important to emphasize that, even with the remarkable growth of the Bakken play,4(4 See ND Monthly Bakken Oil Production Statistics, North Dakota Industrial Commission Oil and Gas Division, https://www.dmr.nd.gov/oilgas/stats/historicalbakkenoilstats.pdf(last visited April 10, 2018) (showing a total of 470 Bakken/Sanish/Three Forks wells in January 2008, and 11,834 wells in January 2018).) North Dakota's air quality remains high as shown by The North Dakota Ambient Air Quality Monitoring Network. According to the Department of Health the Ambient Air Quality Monitoring Network is

"designed to monitor those air pollutants that demonstrate the greatest potential for deteriorating the air quality of North Dakota.5(5 U.S. Department of the Interior, Director (630), Page 14. April 23, 2018) 6(6 See Annual Report, North Dakota Ambient Monitoring Network Plan with Data Summary 2017 at 35, North Dakota Department of Health Division of Air Quality, http://www.ndhealth.gov/AQ/ambient/Annual%20Reports/ARNP_16-17.pdf (hereinafter, Ambient Monitoring Annual Report).) Most of the Network's monitoring sites are located in the western third of the state, either inside or near the heart of Bakken development.7(7 The Exhibit B attachment to these Comments includes a map showing the locations of the monitoring sites that make up the North Dakota Ambient Air Quality Monitoring Network.) None of the pollutants monitored by the Network exceeded federal standards as of 2016:

4.1 [bull] Carbon Monoxide (CO) The federal CO standard of 35,000 ppb (1-hour) or 9,000 ppb (8-hour) was not exceeded at the monitoring site. The maximum concentrations are as follows: 1-hour - 779 ppb; 8-hour - 400 ppb.

4.3 [bull] Nitrogen Dioxide (NO2) The federal NO2 standard of 100 ppb (1-hour) or 53 ppb (annual) was not exceeded at any of the monitoring sites. The maximum concentrations were as follows: Three-year average of the 98th percentile 1-hour average concentrations - 33 ppb; annual- 4.91 ppb.

4.4 [bull] Ozone (O3) The federal O3 standard of 70 ppb was not exceeded during the year. The maximum fourth-highest 8-hour concentration was 59 ppb.

4.5[bull] Particulate Matter (PM10, PM2.5) The federal PM10 24-hour standard states that the concentration of PM10 in the ambient air should not go over 150 [micro]g/m[sup3] more than once per year on average over a three- year period. The federal PM10 standard was not exceeded during the year. The 4th highest value over three years was 104 [micro]g/m[sup3]. The federal PM2.5 standards of 35 [micro]g/m[sup3] (24-hour) and 12 [micro]g/m[sup3] (annual) were also not exceeded during the year. The maximum concentrations are as follows: 24-hour - 23 [micro]g/m[sup3]; annual - 7.3 [micro]g/m[sup3].

[bull] Sulfur Dioxide (SO2) The federal SO2 standard of 75 ppb (1-hour) was not exceeded at any state operated monitoring site. The maximum concentration measured was: 3-year average 1-hour 99th percentile - 23 ppb.8 (8 Ambient Monitoring Annual Report at 35-36. The report additionally notes that no monitoring was done for certain pollutants, such as lead.)

The available data is clear: North Dakota continues to benefit from air quality that meets standards protective of human health and the environment. The Draft EIS also agrees saying, "Overall air quality conditions are considered good by the NDDH." DEIS at 41. Again, the above listed, specifically NO2, pollutants are nowhere near exceeding the National Air Quality Standards (NAAQS). DEIS at 42. North Dakota has the distinction of not only being the nation's number two oil producer but at the same time, being only one of a hand-full of states to maintain and meet all the nation's ambient air quality standards.

The Draft EIS acknowledges the above information stating, "overall air quality conditions are considered good by the NDDH." DEIS at 41. NDPC would like to reaffirm our question: Why is changing the Draft EIS necessary? There is no evidence showing a need or even a preventative need to amend the Draft EIS to Alternative #3. According to the Draft EIS itself, there is no problem with air quality or pollution in North Dakota. The proposed Alternative #3 attempts to mitigate the impact of an inaccurate prediction of increased NO2 concentrations (more below).

Even as, again, the Draft EIS acknowledges "overall near field modeling found no estimated exceedances of the NAAQS," and "oil and gas emissions in the Williston Basin should be declining on a per well basis due to new regulations and requirements by the [EPA] and the State of North Dakota." DEIS at 48. Not only are these new stipulations overburdensome, they are flat-out unneeded. One has to think only for a moment when reviewing the

evidence to see that emissions are scheduled to go down, not up, and that creating more unneeded regulations is unduly burdensome to our industry.

The proposed new and revised lease stipulations, to the extent grounded in mitigating air quality impacts, must be placed in the context of these data and expected emissions decreases under the existing and new regulatory framework. The Draft EIS, while acknowledging these issues, fails to adequately explain how Alternative #3 would improve air quality or why it is necessary to further mitigate air quality impacts from expected development. In the face of the overwhelmingly strong air quality conditions in the LMNG, and no real demonstration that air quality conditions are likely to deteriorate, NDPC believes any potential air quality impacts associated with future oil and gas development would be best dealt with on an individual, site-specific basis at the permitting stage.

vi. Oil and Gas Industry Efforts to Reduce Green House Gases

At times like these, it's helpful to remember that vast improvements oil and natural gas have made in people's lives, lifting billions out of poverty. It's no coincidence that as energy use and hence greenhouse gas emissions have risen, global poverty and infant mortality have decreased.

Graphs/Image in attachment

We'll continue to highlight to the public that the oil and natural gas industry is the number one reason the United States has reduced greenhouse gas emissions more than any other country. Increased use of natural gas in the electricity sector has provided 63% more emissions reductions than all renewables combined.

Table in Attachment (Electric Power Sector CO2 Savings from changes in Electricity Generation Mix)

The Draft EIS fails to recognize the huge reduction of GHGs that Oil and Gas have had as shown above. The Draft EIS's discussion of greenhouse gas (GHG) emissions is similarly lacking. The Draft EIS states that "GHG emissions per well are expected to decline as a result of . . . declining methane flaring as a percentage of production," and acknowledges that "large fluctuations in flared gas volume create uncertainty in making greenhouse gas emissions estimates from oil production sources." See DEIS at 50-51. GHG emissions will continue to be further reduced through existing regulatory frameworks and consent decree requirements in North Dakota, including methane reduction co-benefits from Green Completions, Leak Detection and Repair Programs (LDAR) (required or implemented as BMPs), use of low- or no-bleed pneumatics, applicable closed vent system requirements, and increased control requirement on storage vessels, among others. The Draft EIS is silent on these measures.

Again, the NDPC sees no applicable evidence there is a need to amend the Draft EIS, especially when it comes to GHG's. There are already stringent regulations in this regard and the industry is bringing down GHG's and are expected to continue to lessen. In terms of GHGs, it is also critical that new or revised lease stipulations not discourage or disincentivize increased gathering and processing infrastructure. One unintended consequence of Alternative #3 is to make it more difficult to build interconnected gathering infrastructure, potentially exacerbating flaring volumes. Thus, as with the remainder of the air quality comments, any concerns about GHG impacts are better addressed through site-specific, permitting processes and the continued lease stipulations under Alternative #1.

i. Actual Emissions Reductions or just More Red Tape?

When it comes to climate change, the United States has reduced greenhouse gas emissions more than any other industrialized country. This information is important to keep in mind when talking about reducing emissions, keeping reality in perspective. As shown below, this information is largely caused by the reductions of CO2 from switching previous modes of energy to cleaner burning natural gas. This is important to recognize when deciding

on these cases that the United States has been reducing its emissions hugely over the past 15 years. Especially seeing as these changes have been made through advancements made in the oil and gas industry and in development of America's natural resources.

Energy Information Administration (EIA) data shows over the last decade that natural gas has delivered a 2,360 million metric ton reduction in carbon dioxide equivalents, 61% of the fuel-switching reductions in the electricity sector, while wind and solar reduced only 1,494 million metric tons, or 39%. The NDPC would like to reaffirm our commitment to protecting the environment and keeping air quality standards high, but the proposed stipulations and regulations of Alternative #3 do nothing to help our industry make technological innovations to help further lower emissions. Instead these regulations put undue burden on the industry forcing very specific means to get to solutions already in line with our values. In other words, the industry wants to lower emissions and keep them at safe and reasonable levels, but the regulatory burdens that inhibit making this goal possible, come in the form of generic requirements provided in Alternative #3 instead of dealing with these issues on a specific case by case basis as in Alternative #1.

Figure in Attachment (Electric Generation CO2 savings from changes in the fuel mix since 2005)

Table in Attachment (Countries with the Largest Reductions in CO2 Emissions During the Last Decade, 2007 to 2016)

Despite the reality that the oil and gas industry has been doing more than renewable energy in reducing CO2 emissions, our industry is met with regulations and stipulations. NDPC is asking that our members have the freedom to continue innovating and driving emissions even lower. Our industry has a four-decade record of success reducing methane emissions. Regulations and stipulations that claim to be about the environment should allow the industry the ability to succeed, not tie energy producers up in further red tape.

vii. Unscientific Data Modeling Concerning Nitrogen Dioxide

The NDPC has major concerns in regard to the Nitrogen Dioxide (NO2) model as set forth in the "Near-Field\Visibility Air Quality Impact Analysis for the Oil and Gas Development and Leasing Activities on the Little Missouri National Grassland", which is referred to hereafter as "Anderson and Dzomba." There are issues with making an overly broad assumption that all 1-hour NO2 emissions are at the same level as the levels that were measured in Anderson and Dzomba, and with the uncertainty of the model itself, as discussed below. NDPC recommends, in the absence of accurate scientific data on the NO2 emissions, that the USFS chooses Alternative #1. Accordingly, it is not necessary nor productive to conduct further modeling or update the analysis before finalizing the EIS because this can be done under Alternative #1 during the permitting stage, and the NDPC specifically requests that finalization of the EIS not be held up by such efforts.

The rest of these comments will focus on the NO2 standard and the modeling used to create these projections. This process is uncharacteristic of a typical drilling operation and to use this projection as a way to rationalize supporting Alternative #3 is un-scientific, untrue and problematic for our members. To begin the emission rates are based on conservatively assumed peak emission rates and assume continuous operations at one location.

In reality, drilling operations last approximately 8 to 10 days per well including completion of operations, and are temporary with hourly emission rates that fluctuate below peak emissions.

There are many issues with this model. The use of generic assumptions on equipment in lieu of site-specific data, dated and uncharacteristic meteorological and background data, the use of dated model versions and pre-processors, initial emissions estimates being based on Tier I - Tier III emissions limits for drilling and fracking/completion stages, and a NO2-to-NOx in-stack ratio of 0.17 for all modeled sources. These assumptions used in the model are biased and tend to assert higher impacts than the actual results. This is because the

results are influenced by terrain, elevation and hourly meteorology relative to the location. Further, the predicted impacts from hydraulic fracturing only are 1.5% above the 1-hour NO2 standard. Given the conservative nature of the analysis, model uncertainty, and narrow margin of exceedance, it would not be appropriate to institute lease stipulations or suggest buffer distances based solely on uncharacteristic modeling.

There are unforeseeable problems with data collection including issues with the version of near-field modeling as selected for data forecasting. As stated on page 4 of Anderson and Dzomba, 2014 regarding the version of the AERMOD air quality model selected for the near-field analysis: "[v]ersion 13350 was used for this analysis". Since then, four new versions of AERMOD have been released by USEPA. Changing the version of the AERMOD has the possibility of altering the model results, particularly with respect to treatment of meteorological data and EPA approval of adjusted u-star options. Again, given the above information, NDPC urges USFS to select Alternative #1. Alternative #1 would allow for site-specific permitting decisions based on the modeling of the most updated AERMOD version.

Now, to address the NO2-to NOX in-stack ratio. The Draft EIS's generalized assumptions and input data used to characterize NO2-to NOX in-stack ratios is overly conservative. Precisely, the use of an NO2-to- NOx in- stack ratio of 0.17 for all modeled sources. See id. at 6. Model-predicted impacts of nitrogen dioxide is highly sensitive to the use of in-stack NO2-to-NOX in-stack ratios (ISR) and the source mixture included in the modeling analysis typically has a wide range of values, as is shown in the references cited by Anderson and Dzomba (2014) on page 6. An ISR value of 0.17 is very high for hydraulic fracturing and drilling engines. The typical ISR value of engine manufacturers and field test data support a number closer to 0.05.9

Taken together, the Draft EIS's generalized assumptions and input data used to model and characterize oil and gas development activities is generally overly conservative, does not adequately account for site- specific variables (which are many), and as a result, likely over-estimates potential impacts. Similarly, basing lease stipulations (or even suggested buffer distances) on the modeled estimates, as in NP's case, would likely mean forcing costly and potentially prohibitive mitigation measures on activities that are creating no adverse air quality impacts. Accordingly, it is inappropriate to adopt the new and revised lease stipulations to mitigate estimated air quality impacts, as Alternative #3 currently does. The comments next discuss issues with the Draft EIS's discussion of potential setbacks.

viii. Draft EIS Suggests Quarter-mile setbacks: These Setbacks have no grounding in the Facts

The suggested setbacks or "buffer" being necessary is referenced multiple times in the Draft EIS and the reason given is to help mitigate nitrogen dioxide impacts. See DEIS at 45. Overall, the data pointing to the necessary use of setbacks or buffers has, above, been proven to be questionable at best, and therefore, NDPC requests the USFS select Alternative #1. Moreover, it is not appropriate for the USFS, an agency without technical expertise in air quality matters, to be suggesting an appropriate setback distance in an EIS. Air quality experts across the country continue to vigorously debate this issue and the science is far from settled. As shown, in the limited instances where regulators in Texas and Colorado have put in place setbacks, they have been extraordinarily careful to qualify the setbacks as politically necessary and not scientifically based. For example, in 2013, a paper published in Energy Policy examined urban gas drilling and distance ordinates in the Texas Barnett shale and found that "there is no uniform setback distance, distances have increased over time, and, rather than technically-based, setbacks are political compromises."8 (9 See Tables 1-3 and 1-4 of the "Draft Converse County EIS Air Quality Technical Support Document, Attachment D" Available at: https://eplanning.blm.gov/epl-front-office/projects/nepa/66551/131874/160936/13_Converse_County_DEIS_Appendix_A_AQTSD_attachm ents.pdf)

Similarly, the Colorado Oil and Gas Conservation Commission, in its 2013 Statement of Basis concerning location requirements for Oil and Gas Facilities (e.g., "Setback Rules"), explicitly states that "these Setback

Rules are not intended to address potential human health impacts associated with air emissions related to oil and gas development" on the basis that "there are numerous data gaps related to oil and gas development's potential effect on human health and that such data gaps warrant further study", after consulting with the Colorado Department of Health and Environment (CDPHE).10(10 Available at https://cogcc.state.co.us/documents/reg/Rules/2012/setback/Final_SetbackRulesStatementOfBasisAndPurpose.pdf.)

A more recent report released in 2017 by the CDPHE suggests the risk of harmful health effects is low for residents living at distances 500 feet or more from oil and gas operations and calls for more study, rather than immediate public health action.11(11 Available at https://www.colorado.gov/pacific/cdphe/news/OG-health- study or https://drive.google.com/file/d/0B0tmPQ67k3NVVFc1TFg1eDhMMjQ/view.) Notably, both Texas and Colorado were addressing oil and gas development in highly urbanized areas, which stands in stark contrast to the rural, sparsely populated LMNG.

ix. NEPA Reviews Favor Addressing Air Quality Issues on a Site-Specific Basis

12 NEPA Reviews support NDPC's request that Alternative #1 rather than Alternative #2 or #3 be used in addressing issues in regard to air quality impacts. NDPC presents three cases in which site-specific mitigation is best. The first example is the final EIS for the Bull Mountain project in Colorado. BLM chose a flexible, site-specific permitting over a programmatic (i.e., lease stipulation) approach to mitigating air quality impacts, despite the potential for adverse impacts from HAP emissions.12(See e.g., Bull Mountain Unit Master Development Plan, ROD, DOI-BLM-CO-S050-2013-0022-EIS (October 2017) (available here https://eplanning.blm.gov/epl-front-office/projects/nepa/66641/122210/149076/2017- 1004_Bull_Mountain_EIS_ROD_web.pdf)) The BLM found that review of future development proposals for NEPA adequacy would allow for adequate analysis of potential air quality impacts on a site-specific basis. Id. at

6.1. BLM took this approach despite the fact there was some potential for near-field HAP impacts in certain locations. See id. To ensure NEPA compliance, BLM stated that it will "request that the operator provide [project-specific] information to facilitate the BLM's review of future applications for development approvals." Id. Importantly, BLM admitted that there were "several overestimating assumptions included in the near-field short-term nitrogen oxides analysis" and due to these overly conservative assumptions "additional analysis and mitigation requirements are unlikely to be needed, if emissions from proposed operations are within the bounds described and analyzed in the Final EIS." See id. at 1-20 (response to comments).

13 The second NEPA Review concerns White River National Forest in Colorado, the USFS declined running a near-field analysis "due to the broad assumptions made regarding the sitting or potential future oil and gas development."13(See White River National Forest Oil and Gas Leasing Final Environmental Impact Statement Section 3.2.7, available here https://www.fs.usda.gov/nfs/11558/www/nepa/61875_FSPLT3_2395824.pdf.)

The USFS noted that "future oil and gas developments will include an air quality analysis of project-specific impacts as they are proposed," which would include near-field analysis where appropriate. Id. Notably, the USFS "determined that the authority provided by the Standard Terms and Conditions of a lease (Lease Form 3100-11), Federal Onshore Oil and Gas orders and regulations . . . were sufficient to protect the [air] resource and a special stipulation was not needed to modify the terms of the lease." Id. at 3.2.7.1. Rather, "these authorities would be used during the submittal, review, and approval process of an [APD]" and that "mitigation needed at the time of development such as avoidance, timing, special inventories, or other requirements needed to analyze and mitigate the effects would be implemented through the use of [COAs] without exceeding valid existing lease rights." Id.

The third example being a 2016 Environmental Assessment for Spring Creek Mine in Big Horn County, Montana (federal Coal Lease MTM-94378) the Department of Interior's Office of Surface Mining Reclamation and

Enforcement (OSMRE) found even with air quality impacts occurring that these impacts were "minor" with no "significant impacts to air resources" and required no programmatic mitigation measures. Considering this, the EA concluded that "any mitigation measure proposed by OSMRE imposing more stringent emission limits at generating stations and upon oil and gas operators is beyond OSMRE's authority and its implementation would be highly remote and speculative."

NDPC request these cases be taken into consideration by the USFS on the Draft EIS and that a similar approach be taken. The proposed Draft EIS under Alternative #3 would be a stringent and programmatic 'one size fits all' approach, and is inefficient for all stakeholders, especially in regard to taking necessary actions reducing environmental impact.

x. Existing Air Quality Regulations Are Already In Place

The NDPC would like to point out that the oil and gas industry is already obligated to follow existing air quality regulations. These air quality regulations are upheld and made to hold the oil and gas industry accountable to these standards. In response to this, NDPC asks that the adoption of a policy of no surface use from May 1st through December 1st, as drafted in Alternative #3, be removed. The Federal Clean Air Act, 42 USC [sect] 7401 et seq., requires the U.S. Environmental Protection Agency (EPA) to establish and periodically review NAAQS for six criteria pollutants including nitrogen dioxides (NO2). These NAAQS represent maximum levels of ambient air pollution that are considered safe, with an adequate margin of safety, to protect both public health and welfare. All areas within North Dakota including the area in question have currently been classified as "attainment" at 40 CFR [sect] 81.332 for all criteria pollutants including NO2. The DEIS cites a North Dakota Department of Health report summarizing air quality monitoring data from 2016 and recognizes that none of the pollutants monitored, including NO2, exceed Federal standards. See DEIS on 42, see also section vi. of this report.

Under the Clean Air Act, states have the primary responsibility for regulating air emissions within their borders. This means that in the LMNG, these standards are applied to existing and future oil operations. The Clean Air Act also specifies that the state have a state implementation plan (SIP) outlining the way in which the state maintains the primary and secondary NAAQS levels and meets federal goals and objectives under the Clean Air Act. For further details, see North Dakota's SIP 40 CFR [sect] 52.1822.

Additionally, there are other regulations imposed on the oil and gas industry to limit and enforce air quality standards, such as the New Source Performance Standards (40 CFR [sect]60), Maximum Achievable Control Technology standards (40 CFR [sect]63), and Non-road engine standards (40 CFR [sect]1048), as well as specific North Dakota subject consent decree requirements which incorporate many of these federal programs. Collectively, these regulations establish control requirements and emission limits for criteria pollutants, hazardous air pollutants, and greenhouse gases for exploration and production sources.

It is important to reiterate that the Draft EIS is using an air quality model that is conservative and the model does not accurately represent the reality of the situation. There are many regulations as mentioned throughout this report that already hold oil and gas accountable to clean air standards. The USFS has provided no significant evidence or discussion demonstrating that drilling operations should be prohibited from May 1st through December 1st, and as such, the NDPC requests that USFS not adopt Alternative #3.

xi. Conclusion on Air Quality Provisions

For the reasons discussed in this section of the comments, there is no support for Alternative #3 from an air quality impact mitigation perspective. All relevant, actual air quality data in the LMNG vicinity supports maintaining current conditions under Alternative #1. There simply is not a credible air quality concern from a public health or NAAQS perspective associated with future O&G development in the LMNG that would warrant the new or revised lease stipulations on an air-quality mitigation basis.

There also is no sound scientific support for Alternative #3 from an air quality perspective, which includes timing or distance stipulations based on the results of an overly-conservative NO2 modeling effort. Similarly, it is inappropriate to suggest any setback or buffer distance would be appropriate. Experience in other parts of the country confirms this issue is rapidly evolving, but currently without scientific consensus. Moreover, where setbacks have been put in place, they have been done so in highly urbanized areas out of political concerns (i.e., the City of Fort Worth and the Colorado Front Range). Finally, the multi-layered regulatory framework governing air quality permitting and air emissions more generally, including the State of North Dakota's stationary source permitting program and ambient air monitoring network, will provide the necessary safeguards to protect air quality in the LMNG under Alternative #1. Reliance on this regulatory framework, combined with permitting-level NEPA review has been the preferred approach in other, larger oil and gas EIS's. And there is no reason to depart from this precedent. Adoption of Alternative #1 will still provide all necessary and available protections for future air quality concerns associated with development in the LMNG.

xii. Wildlife

Under the Draft EIS under Alternative #3, stipulations regarding active leks or sage grouse have increased to an irrational level the burden of developing America's resources in the LMNG. NDPC has found considerable problems with adopting Alternative #3. These regulations would limit operations without any data on record of disturbing environment or even the possibility of harming endangered species mentioned in the Draft EIS.

To begin, consider that at this time the USFS and BLM are currently revising the associated land management plan amendments to address greater sage grouse and its habitat on USFS and BLM administered land. While this is taking place, the NDPC would like to point out that it would be against common reason to make other sets of regulations while another regulatory document is under review at this time by your own agency. While these amendments are being revised, it is critical to avoid putting in place inflexible lease stipulations that may conflict with or run counter to the final revised amendments by the BLM. Moreover, as the Draft EIS acknowledges, "a lease notice, applied to all leases insures that consultation under the [ESA] will occur and specific mitigations will be imposed for oil and gas development" and that "stipulations for other resources may directly or indirectly benefit listed species." DEIS at 67; see also id. at 76 (the Dakota Prairie Grasslands Plan would be followed for site-specific leasing decisions and may reduce effects for threatened and endangered species). Given this information, adopting Alternative #3 is ineffective and the protections for species are already done under current stipulations.

Furthermore, the record does not support a finding that the new lease stipulations proposed under Alternative #3 are necessary or will effectively or proportionally mitigate potential impacts to sage grouse. In fact, the Draft EIS makes no distinction between impacts to sage grouse under Alternative #1 vs. Alternative #3. The Draft EIS determines that under Alternative #1, there may be impacts to individuals or habitat "but will not likely contribute to a trend toward Federal listing or a loss of viability to the population or species." DEIS at 82. The Draft EIS draws the exact same conclusion under Alternative #3; yet fails to provide any reasonable explanation either in the body of the report or the supporting reports as to why Alternative #3 should still be preferred. See DEIS at 85. This is a violation of the applicable NEPA regulations, which require the agency to provide a "clear basis for choice among the options." 40 C.F.R. [sect] 1502.14. The failure to provide a clear basis for preferred Alternative #3 on one hand, while consistently stating that Alternative #1 is effective as the other. This is also a problem in other areas of the Draft EIS as well.

Another of the deficiencies is the lack of acknowledging the fact that oil and gas development is not responsible for creating a decrease in the population of sage grouse. See Wildlife Report and Biological Evaluation at 18 (listing the reasons for the decline, none of which relate to oil and gas development). Additionally, sage grouse aren't now or in the past, widespread throughout North Dakota. In fact, their present home is in the Southwestern part of North Dakota. See DEIS at 81. To our amazement there aren't even active leks in the LMNG, "no leks on

National Forest System lands [that] remain active" and it would only be after hypothetically reintroduction that it would even be theoretically possible for sage grouse to survive. See Wildlife Report at 31 ("if sage-grouse were to occur on the LMNG"); see also Weyerhaeuser Co v. U.S. Fish and Wildlife Service, 139 S.Ct. 361 (2018) (holding that an area is eligible for designation as a "critical habitat" under the ESA only if it is actually "habitat" for the species). Given this evidence, serious questions must be considered in making all of these regulations to protect a species that on this record are not even there. NDPC again requests that Alternative #3 not be selected.

In addition to the above-mentioned information, the Draft EIS focuses its findings on a single study for the lease stipulations in reference to sage grouse mitigation. The Draft EIS cites Wildlife Report cite Manier et al (2014) and then quickly refers to the 3.1 to 5-mile radius buffer. DEIS at 81. This study's results have been disputed in a Data Quality Act challenge to the Department of Interior over dissemination of information. In this challenge it is noted that the buffer distance, referred to in the Draft EIS, has no evidence for making any impact on the results of the sage grouse population. These distances are based on erroneous assumptions regarding male lek attendance and ignores the evidence that human activity has little to do with the declining population. The Draft EIS fails to recognize any of the previously mentioned facts, which are pertinent when making a decision based off of them.

Furthermore, the Wildlife Report states that the current stipulations "are inconsistent with stipulations that have been identified for nearby land under different agency management" and that "there is a discrepancy between the current no surface occupancy and that suggested in scientific literature." Wildlife Report at 31. Yet, the report fails to refer to the scientific literature, nor does it give the specifics, such as what "different agency management," nor does it make reference to the other stipulations, nor clarify "nearby lands." Cherry-picking one disputed scientific study without any further analysis or discussion does not constitute the "hard look" required by NEPA. See Consol. Delta Smelt Cases, 717 F. Supp. 2d 1021, 1061 (E.D. Cal. 2010), citation omitted (holding that an agency may not rely on "ambiguous studies as evidence" to support findings made under the ESA; see also, Rock Creek Alliance v. U.S. Fish & Wildlife Service, 390 F.Supp.2d 993 (D. Mont. 2005) (rejecting FWS's reliance on a disputed scientific report, which explicitly stated its analysis was not applicable to the small populations addressed in the challenged opinion). It also needs to be mentioned that the endangered or sensitive species have had no past affects as a result of oil and gas development.

Essentially, NDPC and our members do not see the evidence required to justify creating more burdensome regulations and our industry fails to see any positive effects of more requirements. The timing and NSO regulations fail to help mitigate impact to sage grouse and fail to adequately reference the studies that it relies upon. Instead we are left with a myriad of new stipulations based on a challenged wildlife report, reports of no active leks, evidence of no adverse effects caused by oil and gas development and finally an ambiguous, cherry picked scientific study. Common sense also counsels against adopting new or revised lease stipulations while the USFS and BLM are finalizing the agencies' sage grouse amendments.

xiii. Recreation

Alternative #3 would create NSO and timing restrictions, and a stipulation regarding roadless areas. These stipulations are based on supposed recreational impacts. NEPA requires an EIS to examine indirect environmental effects, it only requires examination of effects that are reasonably foreseeable and "there is no need to consider potential effects that are highly speculative or indefinite." See North Carolina Alliance for Trans'p Reform v. U.S. Dep't of Trans'p, 151 F. Supp 2d 661, 695-6 (M.D.N.C. 2001) citation omitted. The new and revised lease "recreation-based" stipulations are grounded entirely on an unsubstantiated, future, and unknown potential for adverse impacts. There is no way to account for these impacts and no analysis can fix this. The effect of these stipulations is significant and will create unnecessary burdensome effects.

The following maps, which are drawn from publicly available information, but are not in the record, depict the

inventoried "Roadless Areas" in the Badlands (pink). The first is a higher-level look at the inventoried Roadless Areas in and amongst existing roads and oil and gas development. The second image shows the existing roads and well locations (blue diamonds) that are currently in inventoried Roadless Areas. The new NSO lease stipulation would shut down future development of these existing leaseholds, which as these maps depict, is a very significant area. The Draft EIS does not explain why such draconian and severe measures are necessary, nor does it detail why the current framework is insufficient to mitigate the impacts in these inventoried areas.

Maps in attachment

These stipulations are based on general, speculative, and uncertain potential future development. There is no evidence of a need to create more stipulations or why it is necessary to adopt such stringent stipulations. For example, the Recreation and Related Resources Report acknowledges that the new and revised lease stipulations would only insure mitigation "if, in the future, additional developed recreation sites are built" and when discussing noise pollution, notes "that this [recreation] analysis covers many areas and the exact location of proposed operations is unknown." See Recreation Report at 29, 4; see also id. at 23 ("The level of protection depends on the level of development of existing and future leases."). The Draft EIS also refers to the increase of recreational lands but fails to specify where or how, if at all, these future developments will affect oil and gas development. Recreational use of the land is supported by NDPC, but as laid out in the Draft EIS, it is unsupportable. Increasing regulations and stipulations using speculative and uncertain information would result in nearly 20% increase in NSO-designated areas, placing almost 60% of federal mineral ownership into NSO designation. See Recreational Report at Table 17.

NDPC reiterates that site-specific flexibility allows for a collaborative effort resulting in the best decision being made using current information and existing regulations. It is important to note that the Recreation Report acknowledges that Alternative #1 along with pre-existing processes imposed by NEPA are sufficient mitigation. "The undeveloped character of the land would be largely protected" and that "[m]ost of the [] indirect effects would be mitigated through the current stipulations, lease notices, and the conditions of approval." Recreation Report at 23. There is a plethora of documentation of existing mitigating regulations that are in effect, and the Draft EIS does not contradict this information. See Recreation Report 24-26. The justification for these new stipulations imposed by Alternative #3 are based on "only if" scenarios.

Alternative #3's burdensome requirements will be effective, only if an unspecified, unquantifiable amount of recreational lands are developed.

The concern that NDPC has with adopting Alternative #3 are continuous throughout the Draft EIS. NSOs have the demonstrated effect of concentrating and pushing development onto adjacent landowners (private and state) that are not subject to the restrictions. This reality is not acknowledged nor accounted for in the Draft EIS and it is not fair for those landowners or optimal for the LMNG as a whole. The Draft EIS claims that existing federal leases will not be affected by the new stipulations of Alternative #3. This is misleading in that it does not acknowledge the mechanism by which multiple leases are pooled together for horizontal well development and it also ignores the deleterious effect of federal stipulations on private and state minerals. For example, when the surface location of the proposed development is on nonfederal lands but includes federal minerals (a split estate as described in the Draft EIS), the BLM may still apply all stipulations on the federal mineral lease to the Conditions of Approval for the permit, thereby impeding the reasonable development of private property. The following illustration of two drilling units shows how minority tracts of currently unleased federal minerals are: a) preventing the development of both leased federal and leased private minerals, as well as b) when leased, will impinge upon the currently leased mineral estate with conditions of approval that are based on stipulations considered in the DEIS.

Graphs in attachment

These examples demonstrate that the Draft EIS incorrectly concludes that the lease stipulations are limited only to administratively available leases with USFS surface. They also reinforce NDCP's position that lease stipulations should be used sparingly as they are rigid and often carry more unintended consequences.

i. Conclusion

In conclusion, the NDPC strongly recommends that the USFS select Alternative #1. As shown throughout this report, the proposed changes under Draft EIS Alternative #3 are not justified and do not provide less environmental impact. In summary, the Draft EIS under Alternative #3 fails to do what it set out to do in the first place; it makes unscientifically grounded assumptions of future development, increases impact to the environment, both in air and land, fails to acknowledge ground-breaking technological innovations in the industry, fails to acknowledge existing state and federal regulations, fails to give adequate evidence for changing current lease stipulations, and ultimately fails to do what is best for the environment, state, country, mineral owners, the public and our members.