eog resources

**EOG Resources, Inc.**
600 Seventeenth Street
Suite 1100N
Denver, CO 80202
(303) 572-9000
Fax: (303) 824-5400

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PINEDALE RESOURCE AREA OFFICE

February 11, 2008

Bureau of Land Management
Pinedale Field Office
Caleb Hiner, Project Manager
432 East Mill Street
Pinedale, WY 82941
WYMAIL_PAPA_YRA@blm.gov

Re: EOG Resources, Inc.'s Comments Regarding the Revised Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project

Dear Caleb:

EOG Resources, Inc. (EOG) offers the following comments on the Revised Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Project Area Oil and Gas Exploration and Development Project ("PAPA RSDEIS" or "RSDEIS"). EOG owns multiple oil and gas leases within the Pinedale Field Office and supports continued oil and gas development within the Pinedale Anticline Field. In particular, EOG supports the BLM's new Preferred Alternative, Alternative D, and urges the BLM to issue a final EIS and Record of Decision (ROD) as quickly as possible.

## GENERAL COMMENTS

EOG believes the PAPA RSDEIS satisfies the dual purposes of the National Environmental Policy Act of 1969 (NEPA): to analyze the potential impacts of a proposed federal action and to inform the public of those potential impacts. *See Baltimore Gas & Elec. v. Natural Res. Def. Council*, 462 U.S. 87, 97 (1983). As the BLM is aware, NEPA is a procedural statute intended to produce informed decision making by federal agencies. *United States Dep't of Trans. v. Public Citizen*, 541 U.S. 752, 756-57 (2004); *Lee v. United States Air Force*, 354 F.3d 1229, 1237 (10th Cir. 2004). Although NEPA requires agencies to follow specific procedures when authorizing actions that significantly affect the environment, NEPA does not impose any requirement on agencies to reach a particular decision. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350-51 (1989); *Lee*, 354 F.3d at 1237. Furthermore, NEPA does not require agencies "to elevate environmental concerns over other valid concerns." *Lee*, 354

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F.3d at 1237. Once the agency adequately identifies and evaluates environmental concerns, "NEPA places no further constraint on agency actions." *Pennaco Energy, Inc. v. United States Dep't of the Interior*, 377 F.3d 1147, 1150 (10th Cir. 2004).

**STAGED DEVELOPMENT**

PA-1

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EOG is concerned with the potential precedent established by BLM's use of staged or phased development as proposed in the PAPA RSDEIS under Alternatives B, C, and D. Under staged development, development in one section of a natural gas field proceeds while development is limited or prohibited in another. Staged development may be possible in PAPA because of the lease ownership pattern and development plans within PAPA, but it is not appropriate in other natural gas development projects. Staged development may be considered in the PAPA only because of the concentration of lease ownership in the northern, northeastern, and, to a lesser extent, the central sections of the PAPA. As the BLM is aware, however, lease ownership in most natural gas fields does not allow staged development because lease ownership may be more fragmented, as in the Moxa Arch Field and LaBarge Platform, or may be concentrated in patterns that are not conducive to staged development. In some circumstances, staged development could even actually deny operators the right to develop their leasehold for long periods of time in violation of their lease rights and obligations. *Bass Enterprise Prod. Co. v. United States,* 48 Fed. Cl. 621, 625 (Fed. Cl. 1999). Furthermore, staged development could also create unnecessary impacts on other public land users, such as holders of grazing rights, because impacts of development could be concentrated in one area at one time. In other circumstances, staged development could result in some operators unfairly benefiting from changes in commodity prices, while other operators unfairly bear the burden of changed prices. Federal courts have recognized that a temporary taking occurs when the BLM prohibits oil and gas development on a lease for a substantial period of time.

**WILDLIFE IMPACTS**

**Pronghorn**

W-1

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The PAPA SDEIS exaggerates the potential impacts from oil and gas development to pronghorn in the project area. Specifically, on pages 3-121 – 3-122 and 4-149 of the PAPA RSDEIS, the BLM relies on the Berger (2006) study to support its proposition that antelope do not utilize habitat near oil and gas development. The BLM does not emphasize the more significant conclusion from the Berger study that no material differences were detected among pronghorn populations exposed to oil and gas development near PAPA and Jonah Field for viability factors such as overall survivability, body mass, stress hormones (glucocorticosteroids), disease antibodies, and vitamins and minerals. *See* Berger, pgs. 16, 19, 22, 31, 35, 45. Additionally, the BLM overlooks that although the pronghorn populations studied by Berger did not utilize habitat near oil and gas, the Berger study does not demonstrate that pronghorn will generally avoid such development. Rather, the behavior observed in the 2006 study was not repeated in 2007 because tagged antelope frequently utilized habitat in Jonah Field. Further, the 2006 results seem inaccurate because the 2006 Berger study observed that

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few, if any, of the study population were captured and tagged within the Jonah Field and also concluded that antelope populations in the area demonstrate "remarkable fidelity" to the areas in which they were captured. The studied populations may not have ever used the lackluster habitat within Jonah Field. *See* Jonah Infill Drilling Project FEIS, pg. 3-55 (BLM 2006) (indicating Jonah Field does not contain any crucial winter range or crucial winter/yearlong range for antelope). Additionally, the Berger study observes that some pronghorn antelope spend extensive time within developed fields and "adjust their patterns of activity to capitalize on areas adjacent to pads when traffic volume and other human disturbances were diminished, such as occurs at night," a phenomenon which can readily be observed in Jonah Field. Berger (2006), pg. 35. Moreover, many species such as pronghorn antelope and mule deer have been found to habituate to increased traffic so long as the movement remains predictable. *See* Reeve, A.F. 1984. *Environmental Influences on Male Pronghorn Home Range and Pronghorn Behavior.* Ph.D. Dissertation; Irby, L.R. *et al.*, 1984; "Management of Mule Deer in Relation to Oil and Gas Development in Montana's Overthrust Belt" *Proceedings III: Issues and Technology in the Management of Impacted Wildlife.*

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W-2

The BLM also overlooks that Berger's assumptions regarding pronghorn avoiding oil and gas development in the Jonah Field were not verified because tagged antelope extensively utilized habitat within Jonah Field during 2007. *See* Berger, 2007, pg. 25 (showing <u>no</u> avoidance of areas of high development in the Jonah Field). The 2007 Berger study contradicts the assumptions drawn in the 2006 report. Read together, the Berger reports demonstrate that oil and gas development does not adversely impact pronghorn in the Sublette Herd. The significant increases in pronghorn populations in the period since oil and gas development began in the PAPA Project Area and Jonah Field reinforce the conclusions of the Berger study.

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W-3

The PAPA SDEIS also fails to recognize the significant increase in antelope populations in the Pinedale Field Office. In 2006, antelope population in the Northern Sublette Herd Unit and the Pronghorn Sublette Herd Unit reached record highs of 28,869 and 60,080, respectively. *See* PAPA SDEIS, pg. 3-120 – 3-131. These levels are substantially higher than levels during the late 1990s, before major oil and gas operations existed in the Pinedale Field Office. In the JIDP EIS, the BLM estimated that antelope populations in the Northern Sublette Herd Unit were 19,900 in 1994 and 17,900 in 1998, compared to the reported 28,869. *See* JIDP FEIS, pg. 3-54; PAPA RSDEIS, pgs. 3-120 – 3-121. By all accounts, antelope populations in the Pinedale Field Office are substantially improving. The overall population of the Sublette Herd exceeds the WGFD's objective of 48,000 animals. The BLM should revise its description of the existing antelope population and the impacts of oil and gas development on said populations.

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W-3

**Sage-Grouse**

W-4

B-4-5

The BLM suggests that "casual observation" of sage-grouse has declined in recent years. *See* PAPA RSDEIS, pg 3-129. The BLM has not explained how the "casual observation" took place, or even if the "casual observation" is accurate. Data set forth in

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the original PAPA SDEIS demonstrated a significant increase in the sage grouse populations in and around the PAPA Project Area. According to Figure 3.22-2, sage-grouse populations on the Mesa and in the vicinity of PAPA are at all-time highs. *See* PAPA SDEIS, pg. 3-117. The dramatic increase in the sage-grouse population since 2003, during which time oil and gas development in the Pinedale Field Office has increased significantly suggests that oil and gas development is not adversely impacting sage-grouse to the extent previously disclosed, that BLM's mitigation measures and management directives are effective, and that the slight decline in sage-grouse populations in the early part of this decade was actually caused by factors other than oil and gas development. The BLM noted in the PAPA SDEIS that "[a]verage male attendance did increase overall on the Mesa, in the PAPA, and off the PAPA during 2005 and 2006." *See* PAPA SDEIS, pg. 3-117. This positive data, however, was completely excluded from the PAPA RSDEIS released in December of 2007. Rather, the BLM provides data indicating harvest of sage-grouse in the area have declined. *See* PAPA RSDEIS, pg. 3-131, Figure 3.22-2. The BLM fails to explain why harvest data is a more accurate representation of sage grouse populations than the actual population counts compiled by the WGFD. The BLM must remove the misleading information regarding harvest success rates with the information and data contained in the original PAPA SDEIS.

BI-4-5

W-5

A recent study by Renee Taylor and Dr. Larry Hayden-Wing regarding the impacts of oil and gas development on sage-grouse in Wyoming suggests that sage-grouse leks in the PAPA Project area continue to be occupied even when impacted by intensive natural gas development occurring in the area. *See* Taylor, Hayden-Wing, *et al.*, *Greater Sage-Grouse Populations and Energy Development in Wyoming*, pg. 27 (EOG Attachment 1). Additionally, the Taylor and Hayden-Wing report demonstrates that sage-grouse populations in the area increased between 2004 and 2006 to record levels. *See* Taylor, Hayden-Wing, *et al.*, *Greater Sage-Grouse Populations and Energy Development in Wyoming*, pg. 27. The Mesa, East Fork, and Speedway complexes all saw increased male attendance between 2004 and 2006. *See* Taylor, Hayden-Wing, *et al.*, *Greater Sage-Grouse Populations and Energy Development in Wyoming*, pgs. 27 - 31. The overall trend for sage-grouse attendance at leks in the Project Area appears to be increasing. *See* Taylor, Hayden-Wing, *et al.*, *Greater Sage-Grouse Populations and Energy Development in Wyoming*, pgs. 30 – 31. In fact, the number of cumulative males has significantly increased since 2005; a period that also saw increased oil and gas development in the Project Area. *See* Taylor, Hayden-Wing, *et al.*, *Greater Sage-Grouse Populations and Energy Development in Wyoming*, pg. 30. The BLM must include this analysis in the Final EIS.

W-6

BI-4-6

W-6

The BLM also neglects to observe that two new active leks have appeared near the Jonah Field and PAPA, suggesting populations of sage-grouse are effectively utilizing habitat outside areas potentially disturbed by oil and gas operations. The BLM should revise section 3.22.1.2 of the PAPA SDEIS to more accurately reflect the current trends and protections available for sage-grouse in the Pinedale Resource Area.

BI-4-7

W-7

W-8 BI-4-8

Information the WGFD released in March of 2007 indicates that although sage-grouse populations have experienced historic declines, mid-term and short-term increases in populations have occurred. *See* Tom Christiansen, Brief Status of Sage-grouse Population Trends and Conservation Planning in Wyoming as of March 16, 2007, and 2007 Sage-grouse Hunting Season Proposal. *See* EOG Attachment 2. Cooperative efforts between the BLM, State of Wyoming, and many others are working and should be allowed to continue. The BLM must revise and update the analysis regarding sage-grouse populations in the Final EIS.

W-9 BI-4-9

The BLM inappropriately relies on the Holloran (2005) study evaluating the potential impacts of natural gas development activities on sage-grouse. In discussing the Holloran study, and any potential conclusions derived therefrom, the BLM must disclose that BLM purposefully waived the seasonal and timing stipulations normally associated with sage-grouse leks and allowed operators to drill near active leks during the strutting season in order to assess the potential impacts. The conclusion in the Holloran study that existing stipulations are not adequate is therefore unfounded. Moreover, even before the release of the Holloran study, the BLM issued new policies increasing protections for sage-grouse. The new protections include new surface use restrictions, timing limitations, and additional surveys prior to operations in sage-grouse habitat. *See* Wyoming Instruction Memorandum 2004-057 (August 16, 2004). These mitigation measures were eventually incorporated into the Pinedale RMP through a maintenance action.

W-10 BI-4-10

In its discussion of the Holloran study and any conclusions derived therefrom, the BLM must disclose that BLM purposefully waived the seasonal and timing stipulations normally associated with sage-grouse leks and allowed the Operators to drill near an active lek during the strutting season in order to assess the potential impacts. The conclusion in the Holloran study that existing stipulations are not adequate therefore appears unfounded and outdated. A recent study prepared by Renee Taylor and Dr. Larry Hayden-Wing confirms that some of Holloran's conclusions are not wholly supported by his data. First, Holloran's study observed two leks to which the BLM's normal timing and spatial restrictions for sage-grouse were not applied. Second, Mr. Holloran obtained his 2004 data during a state-wide decline in sage-grouse attributable to drought and other factors. Recent data from the BLM and WGFD demonstrate a recent increase in sage-grouse populations state-wide and particularly in the vicinity of the Jonah and Pinedale Anticline Fields, the area where Mr. Holloran conducted his study. *See,* Taylor, Hayden-Wing, *et al.*, *Greater Sage-Grouse Populations and Energy Development in Wyoming*, pgs. 25 – 31.

In Section 4.20.3.1 the BLM references revised criteria advanced by the WGFD entitled *Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats – Version 2.0*. *See* PAPA RSDEIS, pg. 4-148. The WGFD has not officially adopted the 2007 version of the *Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats* document referenced by the BLM, although the document was released to certain parties for review.

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W-11 BI-4-11 The WGFD has adopted the 2004 version of the *Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats.* The BLM should delete the reference to the 2007 preliminary draft version.

W-12 BI-4-12 W-13 The BLM must delete references to the Naugle and Walker studies on pages 4-152 and 4-153 of the PAPA RSDEIS or, at a minimum, explain the limitations and criticisms of those studies identified in other recently issued reports. A recently released study by Renee Taylor and Dr. Larry Hayden-Wing regarding the impacts of oil and gas development on sage-grouse in Wyoming question many of the assumptions and findings of the Naugle and Walker reports. *See* Taylor, Hayden-Wing, *et al.*, *Greater Sage-Grouse Populations and Energy Development in Wyoming*. The BLM must review and incorporate the findings of the Taylor and Hayden-Wing report into the PAPA RSDEIS.

**SOCIOECONOMIC RESOURCES**

SE-1 BI-4-13 The BLM observes that oil and gas revenue plays a significant role in the region's economic well-being, and that oil and gas revenues are expected to increase over the next several years. *See* PAPA RSDEIS, pg. 3-7. "In 2005, oil and gas production and ancillary facilities accounted for 96 percent of the total assessed valuation for Sublette County, 55 percent for Lincoln County, and 61 percent for Sweetwater County (Wyoming Department of Revenue, 2007)." *See* PAPA RSDEIS, pg. 3-7. When selecting an alternative for future operations in the PAPA Project Area, the BLM should ensure that its actions do not adversely impact the vitality of oil and gas development in the region. As the BLM notes on page 3-8, the increased revenues from oil and gas development in the area support infrastructure investments in Sublette County including the expansion of the county library, extension and renovation of the courthouse, a new riding area, school remodeling, new baseball fields, new skateboard park, new jail, public landfill, senior center, aquatic center, and public clinic.

The BLM also observes that oil and gas development contributes to the economic benefits in the region, including a very low unemployment rate and higher per capita earnings than the rest of the State. *See* PAPA RSDEIS, pgs. 3-8, 3-11 – 3-13. Although portions of the United States are currently struggling with the possibility of a recession, the economy of Wyoming and particularly southwest Wyoming is strong because of oil and gas development.

SE-2 BI-4-14 The BLM's analysis again demonstrates the significant positive socioeconomic impacts oil and gas development have in southwest Wyoming. Over 94% of ad valorem taxes collected in Sublette County in 2005 came from oil and gas production and development. *See* PAPA RSDEIS, pg. 4-16. The BLM's analysis also demonstrates that local governments receive approximately $42,000 per year for each federal oil and gas well drilled within the State of Wyoming. *See* PAPA RSDEIS, pg. 4-16. The BLM must ensure that the significant, positive impacts of oil and gas development in the Southwest Wyoming are allowed to continue.

**VISUAL RESOURCES**

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BI-4-15

V-1

The BLM states on page 3-40 that the visual resource management (VRM) restrictions currently in place are "subject to change under the forthcoming [Pinedale] RMP [resource management plan] ROD." *See* PAPA RSDEIS, pg. 2-50. The BLM must be aware that they cannot impose new VRM objectives on existing leases. The IBLA has clearly recognized that BLM cannot impose visual resource objectives inconsistent with lease rights, and that BLM must consider the impacts of oil and gas operations and existing leases when developing VRM objectives during the planning process. See *Southern Utah Wilderness Alliance, et al.*, 144 IBLA 70, 84-88 (1998). The BLM cannot impose VRM objectives without considering existing leases and ongoing oil and gas operations.

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V-2

Where the BLM has issued oil and gas leases, it has made the decision to allow the surface disturbance and facilities that accompany oil and gas development. 43 C.F.R. § 3101.1-2. The BLM cannot later attempt to impose a restriction that is inconsistent with existing lease rights, or the BLM's previous management decision. The Interior Board of Land Appeals (IBLA) has addressed a similar situation in past cases. In *Southern Utah Wilderness Alliance*, 144 IBLA 70 (1998) ("SUWA") a resource management plan designated certain land as VRM Class II. The BLM had leased the same lands for oil and gas development. The IBLA found this improper, and it criticized the BLM for applying VRM Class II to lands where it had approved oil and gas leases. It stated that where the BLM has made the decision to issue oil and gas leases, the BLM should not put the same lands in VRM Class II because it is "inherently contradictory" and creates a "conflict." *Southern Utah Wilderness Alliance*, 144 IBLA at 87. The IBLA held that the VRM classifications should not have been set at VRM level II but that "the VRM classification should have expressly been adjusted to at least VRM Class III." *Southern Utah Wilderness Alliance*, 144 IBLA at 85. The BLM must revise and clarify the statement on page 3-50 in light of the limitations on the BLM's authority to modify VRM restrictions.

## AIR QUALITY

Air quality in southwestern Wyoming continues to be an important issue for oil and gas operators, the public, and regulatory agencies. Fortunately, according to the analysis in the JIDP EIS and the PAPA SDEIS, air quality in southwest Wyoming, and particularly in vicinity of the Jonah Field and PAPA, is very good. The BLM appropriately observes that "[v]isibility in the PAPA air quality modeling domain is considered very good, with an average SVR [standard visual range] of over 93.2 miles (Malm 2000)." *See* PAPA SDEIS, pg. 3-66. Emissions data collected near Jonah Field demonstrate compliance with all National and Wyoming Ambient Air Quality Standards ("NAAQS/WAAQS"). *See* PAPA RSDEIS, pg. 3-62. The PAPA SDEIS also observes that visibility in the area is generally improving. Data from the IMPROVE sites in the Bridger Wilderness Area, North Absaroka Wilderness Area, and Yellowstone National Park demonstrate that visibility on the 20% cleanest days and 20% middle days has generally improved since the early 1990s and is, in fact, near record high levels. *See* PAPA RSDEIS, pgs. 3-66 – 3-68. Figures 3.11-1, 3.11-2, and 3.11-3 demonstrate that

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BI-4-17 visibility in the region is improving, at the same time oil and gas development in increasing. Data from the IMPROVE site in the Bridger Wilderness Area demonstrates that visibility on the 20% cleanest days and 20% middle days has generally improved since the early 1990s and is, in fact, near record high levels. *See* PAPA RSDEIS, pg. 3-66. The IMPROVE monitoring data indicates significant improvements in visibility on the cleanest and middle days in the last several years, during which oil and gas development increased in the Kemmerer and Pinedale Resource Areas. *See* PAPA SDEIS, pg. 3-66. Information from the recently released Kemmerer RMP/DEIS confirms that visibility in the area is generally improving. *See* Kemmerer RMP/DEIS, pgs. 3-5 – 3-7. Furthermore, the analysis in the recently released Draft EIS for the Eagle Prospect Exploratory Wells Project, jointly prepared by the BLM and Forest Service, expressly states that visibility in Bridger Wilderness has improved since 1989. *See* Eagle Prospect DEIS, pg. 3-11 ("Trend analysis shows that general visibility in the Bridger Wilderness has improved since 1989 (VIEWS 2006b)."). The IMPROVE monitoring data indicates substantial improvements in visibility on the cleanest and middle days in the last 2-3 years despite increased oil and gas development in Jonah Field and PAPA. Unfortunately, the BLM does not adequately address the improvements in the PAPA RSDIES. Accordingly, the BLM should insert additional language discussing the monitoring data in the PAPA RSFEIS to fully inform the public of improvements in air quality. AQ-1

AQ-2 Similarly, the BLM should include additional information regarding Figures 3.11-4, 3.11-5, and Table 3.11-3, which demonstrate annual deposition levels near Pinedale are well below the Forest Service's administrative levels of concern. When describing atmospheric deposition on page 3-68 of the PAPA RSDEIS, the BLM states that the "USFS has indicated that the current green line values are set too high and do not protect ecosystems from nitrogen and sulfur deposition." The BLM attributes this statement to a single Forest Service employee. *See* PAPA RSDEIS, pg. 3-68. The BLM should not reference such unsubstantiated statements in the PAPA RSDEIS. EOG is not aware of a Forest Service rulemaking or other action to modify or change the Level of Concern for deposition. Until such time as the Forest Service formally announces its intention to modify the Level of Concern, the above statement is misleading and must be removed. BI-4-18 AQ-3

**Conservative Air Modeling**

BI-4-19 The BLM's modeling of the potential air quality impacts for 2005 evidences the overly conservative nature of BLM's air quality modeling, particularly with respect to visibility impacts. The BLM's conservative modeling for 2005 determined the potential for 45 days of 1 deciview impairment at Bridger Wilderness Area. *See* PAPA RSDEIS, pg. 3-73, Table 3.11-6. The 2005 IMPROVE monitoring data sharply contradicts the BLM's modeling results by demonstrating improved visibility at Bridger Wilderness Area. The BLM should clearly explain that the apparent inconsistency between the 2005 modeling results and the actual monitoring data appears to be a result of the BLM's overly conservative model. The BLM partially recognized the conservative nature of its modeling on page 36 of the PAPA Air Quality Technical Support Document (AQTSD) AQ-4

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AQ-5 BI-4-19

for the PAPA RSDEIS, but never fully acknowledges the conservative nature of its modeling or the fact that models cannot conclusively predict impacts. The BLM should fully disclose the conservative nature of its analysis in the PAPA SFEIS and its role in the NEPA process. As conservative as it was, the BLM's modeling for 2005, which was based on actual emissions data, indicates compliance with all NAAQS/WAAQS. *See* PAPA RSDEIS, pg 3-73; PAPA RSDEIS, AQTSD, pg. 46, Appendix E.

**Compliance with NAAQS/WAAQS**

AQ-6 BI-4-20

The BLM's near-field modeling, which used AERMOD, and its various far-field modeling scenarios, which use CALPUFF (including in-field, mid-field, and far-field modeling), indicate that air quality in southwest Wyoming will be protected despite existing and proposed increased development in the PAPA. The BLM's direct project modeling analysis indicates air quality levels in compliance with all NAAQS/WAAQS under each of the many modeling scenarios presented in the PAPA RSDEIS. *See* PAPA RSDEIS, pgs. 4-69 – 4-92; PAPA Air Quality Technical Support Document ("PAPA AQTSD"), Vol. 1, pgs. 43-52, Appds. M, E. The BLM's cumulative modeling analysis similarly indicates compliance with the applicable NAAQS/WAAQS when the direct project emissions are added to the potential emissions from other regional emission sources, and other, not currently permitted, oil and gas operations. The BLM should emphasize that even its overly conservative modeling determined that air quality in southwestern Wyoming will be adequately protected.

## AIR QUALITY MITIGATION

**BLM's Authority to Regulate Air Quality**

The BLM properly recognizes on pages 4-70 and 4-71 that the WDEQ with oversight from the Environmental Protection Agency, has authority over air quality in Wyoming. As recently recognized by the Interior Board of Land Appeals:

> In Wyoming, ensuring compliance with Federal and State air quality standards, setting maximum allowable limits (NAAQS and WAAQS) for six criteria pollutants (CO (carbon monoxide), $SO_2$ (sulfur dioxide), $NO_2$, ozone and particulate matter ($PM_{10}$ and $PM_{2.5}$)), and setting maximum allowable increases (PSD Increments) above legal baseline concentrations for three of these pollutants (SO2, NO2, and PM10) in Class I and Class II areas is the responsibility of WDEQ [Wyoming Department of Environmental Quality], subject to EPA oversight.

*Wyoming Outdoor Council, et al.*, IBLA No. 2006-155, at 12 (June 28, 2006). The BLM does not have authority to regulate emissions in Wyoming. With respect to actual drilling and development operations, this fact was confirmed by the Pinedale BLM Field Office in a letter to EOG and other oil and gas operators in December of 2006.

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With respect to potential visibility impacts, the BLM's authority is equally limited. Under the Clean Air Act ("CAA"), a federal land manager's authority is strictly limited to considering whether a "proposed major emitting facility will have an adverse impact" on visibility within designated Class I areas. 42 U.S.C. § 7475(d)(2)(B). Under the CAA, the regulation of potential impacts to visibility, and authority over air quality in general, rests with the WDEQ. 42 U.S.C. § 7407(a). The goal of preventing impairment of visibility in Class I areas will be achieved through the regional haze state implementation plans ("SIPs") that are being developed. 42 U.S.C. § 7410(a)(2)(J). Although federal land managers with jurisdiction over Class I areas may participate in the development of regional haze SIPs, as noted above, the BLM has no such jurisdiction in Wyoming. 42 U.S.C. § 7491. Accordingly, the BLM lacks any authority over air quality, and cannot directly or indirectly impose emissions restrictions on natural gas operations in southwest Wyoming, particularly if the overall goal is to reduce potential visibility impacts.

AQ-7 BI-4-21

Nonetheless, the BLM suggests that it cannot authorize activities that do not conform to applicable local, state, tribal, and federal air quality laws. Although the BLM's statement may be partially accurate, the BLM cannot rely on its overly conservative air quality modeling and analysis to imply in any way that its activities may not comply with the CAA or Wyoming's air quality rules and regulations. The BLM's NEPA analysis can only be used to fulfill the agency's obligations of public disclosure and informed agency decision making under NEPA. BLM's analysis does not demonstrate what will happen with the surety necessary to predict future compliance with air quality laws and regulations. The BLM must substantially revise the statement on page 4-71 that imply that the BLM's conservative air quality modeling can be used to demonstrate future compliance, or noncompliance with air quality laws and regulations. The WDEQ and the EPA will implement and impose air emission regulations on stationary and mobile sources in accordance with each agency's authority. If actual WAAQS or NAAQS standard has been exceeded, emissions data – not the BLM's conservative modeling – ever demonstrate that the WDEQ will take the appropriate action to ensure compliance.

AQ-8 BI-4-22

Importantly, the BLM's modeling demonstrates continued compliance with all Wyoming Ambient Air Quality Standards (WAAQS), National Ambient Air Quality Standards (NAAQS), and Prevention of Significant Deterioration (PSD) Increments. *See* PAP RSDEIS, pgs. 4-68 – 4-92. Given the BLM's lack of authority over air emissions in Wyoming, and given the fact the BLM's admittedly conservative modeling demonstrates compliance with the WAAQS, NAAQS, and PSD Increments under the Proposed Action and the various alternatives, the BLM should not attempt to impose overly prescriptive or unnecessary air quality mitigation techniques or conditions of approval on operations in the PAPA Project Area.

AQ-9 BI-4-23

EOG is troubled by the unnecessary air quality mitigation measures described in Section 4.9.3.5 of the PAPA RSDEIS. The language of the RSDEIS, together with the results of the BLM's extensive air quality modeling in the PAPA RSDEIS that

AQ-9 BI-4-23 demonstrate continued compliance with all NAAQS/WAAQS, suggest that the BLM intends to reduce potential visibility impacts through the proposed mitigation. Because actual visibility monitoring proves that visibility has remained relatively constant over the past 15 years and has recently improved despite increased oil and gas activity, the BLM is improperly permitting overly conservative models to drive its management decisions.

**Cap on Emissions**

AQ-10 BI-4-24 [Operations] is particularly concerned with the BLM's attempt to illegally cap potential emissions associated with additional development in the PAPA. The Phase I Mitigation described in Alternatives C and D requires the operators in PAPA to reduce modeled visibility impacts to 2005 actual impact levels within one year after issuance of the ROD. *See* PAPA RSDEIS, pg. 4-80 – 4-87. Alternatives C and Phase II Mitigation would require operators to reduce visibility impact levels associated with modeling 20 percent drilling rig emissions reductions each year for the next 4 years after 2005 impact levels are achieved. *Id.* By imposing these requirements, the BLM is establishing a *de facto* emissions cap in excess of its statutory and regulatory authority. By requiring the operators to demonstrate, through modeling, reduced visibility impacts resulting from significant emission reductions, the BLM is effectively imposing a project-wide air emissions cap. The BLM lacks the authority to impose an emissions cap.

AQ-11 BI-4-25 As the BLM recognized ten years ago in a series of appeals regarding the oil and gas development in the Moxa Arch and Fontenelle project areas, it "would be fundamentally inappropriate for BLM to impose a 'cap' on emissions . . . because the authority and mandate for regulating emissions rests with the State [of Wyoming] through an EPA approved State Implementation Plan." *See* Amended ROD for the Fontenelle Natural Gas Infill Drilling Project, pg. I-14. The BLM has effectively capped emissions by requiring the operators to demonstrate, based upon overly conservative modeling, potential visibility impacts equivalent to significant reductions in emissions. This approach is particularly troubling because the BLM admits that emissions from compression is already at BACT levels and therefore further reductions are not even technically feasible. The BLM must eliminate the *de facto* emissions cap in the PAPA SFEIS and ROD because the WDEQ and not the BLM has the authority to regulate air emissions in Wyoming.

AQ-12 BI-4-26 AQ-12 Further, the BLM lacks authority to impose mitigation measures on oil and gas leases that are not technically or economically feasible. Once the BLM has issued an oil and gas lease conveying the right to access and develop the leasehold, the BLM cannot later impose unreasonable mitigation measures that take away those rights. *See Conner v. Burford*, 84 F.2d 1441, 1449-50 (9th Cir. 1988); 43 C.F.R. § 3101.1-2 (2006) (BLM can impose only "reasonable mitigation measures . . . to minimize adverse impacts . . . to the extent consistent with lease rights granted"). The SDEIS lacks any analysis indicating that the 80% emission reduction—from the 2005 actual emission levels—is possible, much less technologically and economically feasible.

BI-4

**Demonstrating Compliance Through Modeling**

BI-4-27

AQ-13

The BLM suggests it will require operators to demonstrate annually through modeling that their plan to further reduce visibility impairment at the Bridger Wilderness Area is effective. The BLM ignores that the use of modeling is not appropriate when actual monitoring data is available to demonstrate compliance with its goal of reduced visibility impacts. Significant additional monitoring data for southwest Wyoming is becoming available thanks to a cooperative effort by WDEQ and oil and gas operators, including EOG, to purchase and install new monitoring equipment across the region. Although the BLM may rely on models known to be overly conservative to accomplish NEPA's disclosure requirements, the BLM may not rely on overly conservative models to ensure regulatory compliance with BLM's visibility goals. *See State of Ohio v. EPA*, 784 F.2d 224, 230 (6th Cir. 1986) (holding that it is arbitrary and capricious for an agency to use models to set emission limits unless they are checked against real world data). The BLM must delete the requirement to demonstrate compliance through annual modeling.

EOG appreciates the opportunity to submit its comments on the Revised Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project and looks forward to participating in the BLM's analysis of this important project.

If you have any questions regarding these comments, please contact me at your earliest convenience at 303-824-5542 or eric_dille@eogresources.com .

Sincerely,
**EOG RESOURCES, INC.**

Eric A. Dillé, P.G., R.E.M.
Government Affairs