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April 5, 2007

Via Overnight Delivery and Electronic Mail

Bureau of Land Management
 Pinedale Field Office
 Matt Anderson, Project Manager
 432 East Mill Street
 Pinedale, WY 82941

Re: EnCana Oil & Gas (USA) Inc.'s Comments Regarding the Draft
 Supplemental Environmental Impact Statement for the Pinedale Anticline
 Oil and Gas Exploration and Development Project

Dear Mr. Anderson:

EnCana Oil & Gas (USA) Inc. ("EnCana") offers the following comments on the Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Project Area Oil and Gas Exploration and Development Project ("PAPA SDEIS" or "SDEIS"). EnCana produces the most natural gas of any operator in the Jonah Field and submits these comments to the Bureau of Land Management ("BLM") because of the proximity of the Jonah Infill Development Project area ("Jonah Field" or "JIDP") to the PAPA. Despite the proximity of the two fields, the natural gas development activities within Jonah Field and the PAPA are operationally and environmentally very different and entirely separate. Operationally, geologic differences limit the feasibility of directional drilling in Jonah Field. Environmentally, both project areas are also distinct given the absence of riparian habitat and crucial habitat for large mammals in Jonah Field. Given those distinctions, management activities or directions for one natural gas field may not be appropriate or even feasible in another. The BLM should not attempt to manage the two areas with a single management approach, despite their proximity.

EnCana supports continued natural gas activities in the PAPA and encourages BLM to approve additional development. It is important for the BLM to approve and facilitate the production of domestic energy sources such as those present in Jonah Field and

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PAPA. Like Jonah Field, the PAPA is a highly concentrated natural gas resource, and approval of the PAPA Operators' Proposed Action would allow the development of a significant resource of clean-burning natural gas. Improvements to the regional transportation infrastructure included in the PAPA SEIS could further facilitate energy production from the area and should be approved.

Overall, EnCana notes that the SDEIS, as supplemented with the Ozone Modeling Analysis released in February of 2007, satisfies the twin purposes of the National Environmental Policy Act of 1969 ("NEPA") to consider the potential impacts of a proposed federal action and to inform members of the public of those potential impacts. See *Baltimore Gas & Electric v. Natural Resources Defense Council*, 462 U.S. 87, 97 (1983). The BLM should proceed to issue the Final SEIS for the PAPA with all due speed. In addition to these general comments, EnCana offers the following specific comments.

STAGED DEVELOPMENT

EnCana cautions against establishing any precedent with respect to the BLM's use of staged or phased development as expressed in the BLM Preferred Alternative (Alternative C). Staged development, whereby development in one section of a natural gas field is authorized while limited or prohibited in another, may be practicable in PAPA given the lease ownership pattern and development plans within PAPA, but it is generally not appropriate in other natural gas development projects. Lease ownership may be more fragmented, as in portions of Jonah Field and the southern sections of the PAPA, or may be concentrated in patterns that are not conducive to staged development. In certain circumstances, staged development could actually deny operators the right to develop their leasehold for long periods of time in violation of their lease rights and obligations, or allow certain operators to unfairly benefit from, or bear the burden of, changes in commodity prices. 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 time.

WILDLIFE IMPACTS

The PAPA SDEIS overstates the potential impacts to pronghorn antelope from oil and gas development in the vicinity of Jonah Field. In particular, on page 4-130 of the PAPA SDEIS, the BLM cites the Berger (2006) study for the proposition that antelope do not utilize habitat within the Jonah Field. The BLM does not emphasize the more important conclusions from the Berger study, notably that no significant differences were detected among pronghorn populations exposed to oil and gas development near PAPA and Jonah Field for such important viability factors as overall survivability, body mass, stress hormones (glucocorticosteroids), disease antibodies, and vitamins and minerals. See Berger, pgs. 16, 19, 22, 31, 35, 45. Further, the fact that the pronghorn populations studied by Berger did not utilize habitat within the Jonah Field during the study period does not demonstrate that pronghorn will generally avoid Jonah Field. The Berger study notes that few, if any, of the study population were captured and tagged within the

Jonah Field and also determined that antelope populations in the area demonstrate "remarkable fidelity" to the areas in which they were captured. The studied populations may simply not have ever utilized the relatively mediocre habitat within Jonah Field. See JIDP FEIS, pg. 3-55 (indicating Jonah Field does not contain any crucial winter range or crucial winter/yearlong range for antelope). Further, the Berger study notes (pg. 35) 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 be readily observed in Jonah Field.

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The PAPA SDEIS also fails to note the significant increase in antelope populations in the vicinity of Jonah Field and PAPA in recent years. In 2005, antelope populations in the Northern Sublette Herd Unit and the Pronghorn Sublette Herd Unit were at all-time highs of 27,537 and 47,930, respectively. See PAPA SDEIS, pg. 3-107. These levels are dramatically higher than those seen in the late 1990's prior to major oil and gas operations in Jonah Field and PAPA. For example, according to the BLM's analysis in the JIDP EIS, antelope populations in the Northern Sublette Herd Unit were estimated at 19,900 in 1994 and 17,900 in 1998. See JIDP FEIS, pg. 3-54; PAPA SDEIS, pg. 3-107. By all accounts, antelope populations in the vicinity of Jonah Field are not only stable, but improving. With the approval of habitat improvement projects such as those sponsored by the Jonah Interagency Office ("JIO") last year, population trends will likely continue to improve. 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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The BLM also places undue reliance on the Holloran (2005) study regarding the potential impacts of natural gas development activities on sage-grouse. In discussing the Holloran study, and any potential conclusions derived therefrom, the BLM should specifically disclose the fact that in the areas studied by Holloran, BLM purposefully waived the seasonal and timing stipulations normally associated with sage-grouse leks and specifically 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. Moreover, even prior to 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 Resource Management Plan ("RMP") through a maintenance action.

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The PAPA SDEIS also fails to describe the significant increase in sage-grouse populations since 2003. According to the information presented in Figure 3.22-2, it appears sage-grouse populations on the Mesa and in the vicinity of PAPA and Jonah Field are at all time highs. The dramatic increase in the sage-grouse population since 2003, a time period that has included significant increases in oil and gas development in Jonah Field and PAPA, may indicate that oil and gas development is not adversely

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impacting sage-grouse to the extent previously disclosed, that BLM's mitigation measures and management directives are effective, or that the slight decrease in sage-grouse populations in the early part of this decade was actually caused by factors other than oil and gas development. The BLM also fails to note the significance of two new active leks in the vicinity of 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.

AIR QUALITY

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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. Emissions data collected near Jonah Field demonstrate compliance with all National and Wyoming Ambient Air Quality Standards ("NAAQS/WAAQS"). See PAPA SDEIS, pgs. 3-54 – 3-55. The information in the PAPA SDEIS also indicates 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 SDEIS, pgs. 3-58 – 3-59. The IMPROVE monitoring data indicates dramatic 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. *Id.* Unfortunately, the BLM does not adequately explain this information in the PAPA SDEIS and should insert additional language discussing the monitoring data in the PAPA SDEIS to fully inform the public. 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.

Compliance with NAAQS/WAAQS

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The BLM's near-field modeling performed using AERMOD and its various far-field modeling scenarios performed using 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 multitude of modeling scenarios presented in the PAPA SDEIS including: the 2005 look-back modeling; the 2007 No Action scenario; the various 2009 project scenarios; and the 2026 full production scenario. See PAPA SDEIS, pgs. 3-64, 4-65 – 4-70; 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

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added to the potential emissions from other regional emission sources, including emissions from Jonah Field and other, not currently permitted, oil and gas operations. The BLM should stress that even its overly conservative modeling indicates that air quality in southwestern Wyoming will be adequately protected.

2005 Modeling

The BLM's modeling of the potential air quality impacts for 2005 demonstrates the overly conservative nature of BLM's air quality modeling, particularly with respect to visibility impacts. Contrary to the actual IMPROVE visibility monitoring data discussed above, the BLM's conservative modeling for 2005 demonstrates the potential for 45 days of 1 deciview impairment at Bridger Wilderness Area. Although EnCana understands the analysis is not directly comparable, the modeling data appears to be sharply contradicted by the 2005 IMPROVE monitoring data that demonstrates improved visibility at Bridger Wilderness area. The "Fact Sheet" released by the BLM with the PAPA SDEIS acknowledges that despite increased oil and gas development in the area, visibility in the area has remained relatively constant over the past several years. See PAPA SDEIS Fact Sheet, pg. 3. The BLM should clearly explain that the apparent discrepancy between the 2005 modeling results and the actual monitoring data is likely a result of the conservative nature of the BLM's modeling. Although BLM partially acknowledges the conservative nature of emissions modeled on page 37 of the PAPA AQTSD, the BLM never fully explains the conservative nature of its modeling or the fact that models cannot conclusively predict impacts. The BLM should more thoroughly disclose the conservative nature of its analysis in the PAPA SDEIS 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. Unfortunately, the BLM's analysis does not describe how the results of the 2005 air modeling compare to the background data for other criteria pollutants. The BLM should describe whether the 2005 modeling results are similar to or more conservative than the background emissions data gathered during 2005. Such analysis may assist the reader in understanding the conservative nature of BLM's modeling for criteria other than visibility.

AIR QUALITY MITIGATION

The BLM's description of potential air quality mitigation measures described in Section 4.9.5 of the PAPA SDEIS raises serious legal and regulatory concerns and should be significantly revised. Based on the language in Section 4.9.5—and the fact that the BLM's extensive air quality modeling in the PAPA SDEIS demonstrates continued compliance with all NAAQS/WAAQS—it appears the focus of BLM's mitigation measures is to reduce potential visibility impacts. 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 allowing overly conservative models to influence its management decisions. The BLM must not

attempt to limit oil and gas development activities based upon hypothetical impacts derived from such conservative models, especially when such models are not confirmed by or consistent with actual monitoring data.

BLM's Authority to Regulate Air Quality

As recognized in the PAPA SDEIS, BLM has very little authority to regulate air emissions. See PAPA SDEIS, pg. 4-62 ("Air pollution impacts are limited by state and federal regulations, standards, and implementation plans established under the Clean Air Act and administered by the applicable air quality regulatory agency (WDEQ/AQD and EPA) . . . The applicable air quality regulatory agencies have the primary authority and responsibility to review permit applications and to require emission permits, fees, and control devices prior to construction or operation."). 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), SO₂ (sulfur dioxide), NO₂, ozone and particulate matter (PM₁₀ 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 EnCana and other oil and gas operators in December of 2006. In reversing an attempt by BLM to "implement drill rig emission reduction measures," the BLM noted that it "has been administratively determined that BLM does not have the authority to regulate air quality. That authority rests with the Wyoming Department of Environmental Quality." See Letter from Associate Field Manager Roger Bankert, dated December 1, 2005 (sic).

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.

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With these limitations in mind, the BLM must significantly revise, if not delete entirely, its proposed mitigation strategy as expressed in Section 4.9.5. of the PAPA DEIS. As demonstrated by Wyoming's continued compliance with all NAAQS/WAAQS and its progressive and comprehensive air quality regulatory program, WDEQ is fulfilling its responsibility to protect air quality in Wyoming, and BLM should not attempt to illegally regulate air emissions in derogation of WDEQ's authority.

Cap on Emissions

Of particular concern is the BLM's attempt to illegally cap potential emissions associated with additional development in the PAPA. The Phase I Mitigation described in Alternative C requires the operators in PAPA to first "show a reduction in modeled visibility impacts to 2005 actual impact levels" within one year of issuance of the ROD. See PAPA SDEIS, pg. 4-74. Alternative C Phase II Mitigation would require the 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.* In 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 associated with significant emission reductions, the BLM is effectively imposing a project-wide air emissions cap. The BLM lacks the authority to impose an emissions cap, as it recognized ten years ago in a series of appeals regarding the oil and gas development in the Moxa Arch and Fontenelle project areas.

As the BLM has already stated, 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. 1-14. 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. Such an approach is particularly troubling when the BLM admits that emissions from compression is already at BACT levels—meaning that further reductions are not even technically feasible. See PAPA SDEIS, pg. 4-74. The BLM must eliminate this *de facto* emissions CAP in the PAPA SFEIS and ROD, in deference to the WDEQ's authority over air emissions in Wyoming.

Further, the BLM lacks the 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"). There is no indication or analysis in the SDEIS indicating whether the 80% emission reduction—from the 2005

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actual emission levels—is possible, much less technologically and economically feasible.

Demonstrating Compliance Through Modeling

On page 4-75 of the PAPA SDEIS, the BLM indicates the operators will be required to demonstrate “annually through modeling that their plan to further reduce visibility impairment at the Bridger Wilderness Area is effective.” The use of modeling is not appropriate when actual monitoring data is available to demonstrate compliance with the BLM’s goal of reduced visibility impacts. Significant additional monitoring data for southwest Wyoming is already becoming available thanks to a cooperative effort by WDEQ and oil and gas operators, including EnCana, to purchase and install new monitoring equipment across the region. Relying upon models known to be overly conservative may be appropriate to accomplish NEPA’s disclosure requirements, but is not appropriate 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.

EnCana appreciates the opportunity to submit its comments on the 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.

Very truly yours,

ENCANA OIL & GAS (USA) INC.



Constance D. Heath
Team Lead, North Rockies Land

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