

October 19, 2006

Susan Davis  
Hiawatha Regional Energy Project  
Bureau of Land Management  
Rock Springs Field Office  
280 Highway 191 North  
Rock Springs, Wyoming 82901

**Re: Hiawatha Regional Energy Development Project**

Dear Ms. Davis:

We would appreciate the following comments being considered as the Bureau of Land Management (BLM) develops the environmental impacts statement (EIS) for the Hiawatha Regional Energy Development Project (Hiawatha Project).

**I. Air Quality**

We believe the EIS needs to address and seek to protect the air quality in the Hiawatha Project Area. We ask that the following issues be addressed.

- The EIS must address direct and cumulative impacts to visibility in Class I areas. Class I areas of special significance include Rocky Mountain National Park, the Bridger Wilderness Area, the Flat Tops Wilderness Area, and the Mount Zirkel Wilderness Area, although a number of other Class I areas and areas of great public concern (e.g., Dinosaur National Monument) may be affected and should be considered. We request that BLM use 0.5 dv as the measure of significant impacts to Class I areas. This is in accordance with Forest Service and Park Service policy and guidance. We request that BLM consider and abide by the Federal Land Managers Air Quality Related Values Working Group (FLAG) guidelines, available at [http://www.fs.fed.us/r6/aq/natarm/Flag\\_final.pdf](http://www.fs.fed.us/r6/aq/natarm/Flag_final.pdf). As the Federal Land Manager of these areas, BLM should give deference to these policies regarding significance and protection of visibility in Class I areas. BLM must prevent significant impacts in order to comply with the national goal of preventing any impairment to visibility in Class I areas, not merely analyze them, and the record of decision (ROD) for this project should so provide.

- The EIS must fully consider and the ROD prevent deposition of compounds that acidify or fertilize alpine ecosystems at levels that harm air quality related values in Class I areas. In this regard, we request that BLM consider and abide by the critical loads developed for Rocky Mountain National Park and abide by those standards in all Class I areas affected by deposition from the Hiawatha Project. See <http://www.cdph.state.co.us/ap/rmnp/rmnpCLLetter.pdf>. See also <http://www2.nature.nps.gov/air/Pubs/pdf/2005CriticalLoadBioSci.pdf> (establishing critical load levels for Rocky Mountain National Park).
- Ozone is a critical issue that the EIS must address. The Rawlins Resource Management Plan documented that ozone levels were already 94 percent of the National Ambient Air Quality Standard (NAAQS) in this general area and exceedances of the NAAQS are being recorded in the Jonah Field. Significant increases in ozone levels are being detected in Rocky Mountain National Park. [http://www2.nature.nps.gov/air/Pubs/pdf/gpra/Gpra2005\\_Report\\_03202006\\_Final.pdf](http://www2.nature.nps.gov/air/Pubs/pdf/gpra/Gpra2005_Report_03202006_Final.pdf) The Denver area is struggling to avoid non-attainment status for ozone. With respect to ozone, we specifically request that BLM not employ the Scheffe method to estimate ozone levels, and that it instead use a modern and scientifically valid model such as CAMQ or CAMX. The Scheffe method has been found by its developer to have no scientific validity. Exhibit 1. Other, valid methods, such as CAMQ, are available and have utility in rural areas. Exhibits 2 and 3. We ask that Exhibit 2 be generally considered relative to the ozone analysis and not just with respect to the method that will be employed. We would note that even if the EPA and state environmental quality agencies were to acquiesce in the use of the Scheffe method, that would not change the fact that it has been deemed scientifically invalid by its own developer, and thus it could only be used upon an objective showing of its validity for application to this project. Last, because the Denver area is trying to avoid non-attainment status for ozone, the EIS must consider the impact of the precursors to ozone formation generated by the project in the Denver area.
- The scoping notice does not identify hazardous air pollutants as an important issue. The EIS should address emissions of hazardous air pollutants because oil and gas development leads to emissions of a number of these compounds in significant quantities.
- On September 21, 2006, EPA adopted a new NAAQS for PM2.5. <http://www.epa.gov/pmdesignations/> The air quality analysis should recognize and ensure compliance with this new NAAQS.
- Because the Hiawatha Project will be built in both Colorado and Wyoming, there could be different air quality standards imposed by the different states. We request that BLM require the most stringent standard that may be applicable be adopted for the entire project, regardless of the state where the development is located. BLM has this authority. 43 U.S.C. § 1712(c)(8) (BLM is given authority to “provide for compliance” with air quality standards); 43 U.S.C. § 2920.7(b)(3) (in establishing terms and conditions for land use authorizations BLM must “require compliance” with clean air standards). As a particular example, there may be some variation in the requirements for regulating ozone precursors (NO<sub>2</sub> and VOC) established by Wyoming relative to Colorado, and BLM should adopt

the most stringent requirements. Issues related to the differences between the two states are touched on in Exhibit 4 on pages 3-4, and we ask that they be considered.

- The EIS must provide an assessment of the amount of increment that will be consumed for various pollutants in this prevention of significant deterioration (PSD) area. In this respect, we ask that BLM determine how much increment has been consumed since the relevant baseline date, and how much additional increment it predicts will be consumed by the Hiawatha project. We specifically ask that BLM not add the predicted amounts of new pollution to background amounts and claim this provides a measure of increment consumption because background amounts have no relationship to how much increment has been consumed since the baseline date. Whether PSD increments will be consumed or are threatened to be exceeded is certainly a very significant environmental concern, and therefore must be considered in the EIS. An EIS is invalid if it fails to consider the health effects of air pollution, and even a marginal degradation of air quality is environmentally significant. Public Citizen v. Department of Transp., 316 F.3d 1002, 1024 (9<sup>th</sup> Cir. 2000), rev'd on other grounds, 541 U.S. 752 (2004). We are not asking that BLM do a “regulatory” increment consumption analysis, but under the National Environmental Policy Act (NEPA), an EIS must consider all significant environmental issues, and this is certainly such an issue, being a Clean Air Act requirement. While BLM may not take any “regulatory” action based on this analysis, it still must consider and analyze this issue in the EIS to meet the requirements of NEPA.
- We also ask that BLM use appropriate “cutoff dates” for emissions inventories that will be used in this EIS. We have seen a number of BLM EISs where the cutoff date was several years prior to publication of the draft EIS. The emissions inventory was ancient history. This must be avoided here, and an analysis based on the current status of emissions must be provided. We believe the appropriate cutoff date should be the publication date of the draft EIS, and if there is a substantial delay between publication of the draft EIS and the final EIS, the inventory must be updated.
- The cumulative impacts analysis must fully consider all the various contributors to emissions in this area. This certainly includes a number of other oil and gas projects that are approved or in the process of being approved, including the Atlantic Rim Project, Seminole Road Project, Continental-Creston Project, Desolation Flats Project, Jonah Project, Pinedale Anticline Project, and the Moxa Arch Infill Project. BLM should not ignore these projects just because they may not have received final approval; they are all far enough along in the decision-making process (they are all formal proposals and EISs are actively being prepared) to be anything but “speculative.” And together, they represent something like 20,000 to 25,000 wells, which is certainly a level of impact that cannot be ignored, even if these projects have not received absolute final approval. Likewise, the cumulative impacts analysis must fully consider impacts related to the Denver area, especially impacts in Rocky Mountain National Park due to the project and due to the contributions from Denver, and in the Denver area due to the contributions of the project and those from the Denver area itself.

- As part of the record of decision in this matter, BLM must establish and ensure that there is full an adequate monitoring of air pollution from the Hiawatha Project. If BLM does not have the funding available to accomplish this, it should require that the operators fund and provide such monitoring. This is an entirely appropriate exercise of BLM’s obligation to “provide for compliance” with the Clean Air Act, and is being required in other areas, such as the Pinedale Anticline and Jonah fields. Similarly, the EIS should fully consider and as necessary require that the rate of drilling in the Hiawatha Project be limited as necessary to protect air quality. This is an obvious way to reduce air quality impacts, and unlike other means to protect air quality, it is totally within BLM’s authority—only BLM approves APDs (See Part III of these comments for further discussion of this issue). Furthermore, we request that BLM consider and as necessary adopt in the ROD requirements for flareless well completions, the use of Tier 2 compliant technology for drill rigs, and application of the Best Available Control Technology (BACT) on well equipment and infrastructure, with the most stringent state BACT being applied throughout the project area, regardless of the state the well is located in.
- Last, we ask that issues related to global warming be considered. We ask that there be an estimate of how much carbon dioxide will be emitted by this project, and consideration given to the implications of global warming in the project area itself and in this region on a cumulative basis. There is increasing evidence of the substantial impacts global warming is having on western forests, so this is a relevant issue that must be considered. Exhibits 5 and 6. Exhibit 5 shows that warming temperatures are strongly associated with increased wildfire risk, and Exhibit 6 shows warming temperatures are implicated in the increased prevalence of forest disease, both environmentally significant issues.

## **II. Wildlife**

Issues that we believe should be addressed in the EIS relative to wildlife include the following:

- We request that the attached studies regarding the impact of oil and gas development on mule deer be fully considered in the EIS and used as a basis for developing stipulations and/or conditions of approval that will be applied to this project. Exhibits 7 and 8. These studies show that oil and gas development has very severe impacts on mule deer, and thus far more is needed to protect this species than the standard prohibition on wintertime drilling. Consequently, BLM must analyze in the EIS and adopt in the ROD additional provisions adequate to protect this species (See discussion of Wyoming Game and Fish Department Policy below and Part III of these comments). We recognize that these studies may not define and control for every last possible variable or outstanding question regarding drilling impacts on big game and mule deer, but BLM should not let the fact that there is still some uncertainty divert it from recognizing the undeniable bottom-line fact demonstrated by these studies: where oil and gas development is occurring with only the standard prohibition on wintertime drilling in place there

are far fewer deer in the area than there were previously and with respect to a nearby control area where drilling is not occurring. If BLM lets the fact there are still some questions dominate its consideration and framing of this issue it will be engaging in the cigarette industry approach to science—unless you can prove this molecule of nicotine from this cigarette caused this particular cancer to start growing in this person, you have not proven that cigarette smoking has caused harm. That is not science, it is using science as a weapon to prevent informed decision-making. That kind of proof will almost never exist, and BLM should not insist on it here; that will only prevent and stifle informed decision-making based on the best information that is available, which is quite good.

- We also ask that BLM consider the enclosed report on sage grouse, and protections that are needed for sage grouse. Exhibit 9. Dr. Braun is recognized as one of the premier experts on sage grouse, and much of his research has been conducted in this area, including on Cold Springs Mountain. Thus, his recommendations should be carefully considered by BLM and adopted as additional stipulations and/or conditions of approval to ensure that sage grouse in the project area are not harmed.
- They Wyoming Game and Fish Department (WGFD) developed its “Minimum Recommendations for Development of Oil and Gas Resources Within Crucial and Important Wildlife Habitats on BLM Lands,” and we ask that it be considered in the EIS and implemented pursuant to the ROD. <http://gf.state.wy.us/downloads/pdf/og.pdf>. BLM of course has a responsibility to consider state policies and guidance, especially on an issue where the state has special expertise, which is certainly the case with wildlife, and we believe it has a responsibility to abide by this guidance in this case. Adoption of these provisions as stipulations and/or conditions of approval for oil and gas development in the Hiawatha Project area would help ensure that many of the issues raised in the Sawyer and Braun studies mentioned in the prior two bullet points are addressed. If Colorado does not have similar guidelines, we request that the Wyoming guidelines be adopted throughout the project area, and that just as for air, the most protective policies of either state be adopted throughout the project area. In addition, it is worth noting that the Minimum Recommendations report contains an extensive annotated bibliography that is relevant to evaluating the impacts of oil and gas development, and we request that this literature be considered in developing stipulations and/or conditions of approval—WGFD has already done a lot of the heavy lifting by providing these annotated references.
- We are not sure whether elk occur in the project area or not, but we do know there is a herd on Lookout Mountain, which is probably just outside the project area. If elk occur in the project area or could be affected by activities in the project area, we believe that BLM should consider and adopt the provisions related to elk protection that are found in the BLM’s Jack Morrow Hills Coordinated Activity Plan, and consider the literature cited therein (especially the studies of elk in the Jack Morrow Hills area by Powell).
- Habitat fragmentation is a crucial issue and we ask that BLM carefully consider this issue in the EIS. Attached are two reports that address habitat fragmentation, and we ask that BLM consider them. Exhibits 10 and 11. BLM should adopt

these methodologies to make quantitative predictions of to what degree the habitat in the project area will be fragmented. It should also adopt as ROD decisions many of the recommendations made in these reports. In particular, we believe the ROD should provide limits on the density of roads that will be permitted in the area and limits on the density of active well pads that will be permitted (See Part III of these comments for further discussion of BLM authority to provide these limits).

- Last, BLM must carefully address sensitive and special status species protection in this area. These include a number of “sagebrush obligate” species and raptor species. To ensure full protection of these species, BLM should carefully consult with the U.S. Fish and Wildlife Service (as well as the state game and fish agencies) to ensure that it fully protects these species.<sup>1</sup> BLM must carefully adhere to its Special Status Species Management Manual. Even for BLM sensitive species (which receive the same protections as do candidate species), BLM must develop detailed population information, develop specific management plans and conservation strategies, and monitor these species. BLM Special Status Species Management Manual §§ 6840.06.C.1-2; .E. With respect to the highly endangered Colorado River fish species, BLM should consider water depletion issues from the perspective of the totality of this project. The project as a whole will probably deplete at least several hundred acre-feet of water from the Colorado River watershed, necessitating full compliance with the Fish and Wildlife Service protective measures (“RIP/RAP”), including payment of depletions fees; individual wells (which only deplete about 2-3 acre-feet) should not be allowed to escape compliance with the protections for these species. More specifically, a “depletion fee” should be required to be paid into the special fund established to protect the Colorado River fish species based on the total amount of water anticipated to be depleted by drilling 4208 wells and no wells should be permitted until this fee is paid; payment of depletion fees should not be postponed until specific wells are proposed. Approaching this issue at the individual well level is entirely ineffective and ensures that no protections (funds) are provided for these highly endangered fish species.

### **III. Oil and Gas Development and Permitting**

We request that BLM consider the relationships and interactions between terms in BLM’s standard lease form (especially section 6) and its regulation at 43 C.F.R. § 3101.1-2. We request that BLM address the provision in the standard lease form and the regulation stating that the “reasonable measures” BLM can require include certain measures “but are not limited to” those measures. Similarly, we request that BLM address the language in the regulation stating that “at a minimum” certain reasonable measures are consistent with the lease rights granted. It is our view that BLM has retained substantial rights to condition oil and gas exploration and development activities,

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<sup>1</sup> That is, the Fish and Wildlife Service should not just be consulted relative to species listed or proposed for listing under the Endangered Species Act, BLM should solicit and follow its guidance regarding all sensitive and special status species.

and that view is supported by the language in both the standard lease form and in the regulation.

Under the standard lease form, the intent is to “minimize” environmental impacts, and BLM is given the right to require reasonable measures that are deemed necessary to meet the “intent” of minimizing impacts, but those measures “are not limited to” modifications of siting, design, or timing of operations, or the specification of reclamation measures. Under the regulation, BLM is likewise “not limited to” modifying siting, design, timing, and reclamation measures, and the specified reasonable measures that are deemed consistent with the lease rights granted are “at a minimum” of BLM authority. And overlying all of this is the obligation to prevent unnecessary or undue degradation of the public lands pursuant to FLPMA, 43 U.S.C. § 1732(b), which is clearly a nondiscretionary statutory command, which under the regulation gives BLM continued complete authority to regulate development.

Consequently, we ask that BLM discuss in the EIS and provide as ROD decisions the other reasonable measures it will impose on the Hiawatha Project that are consistent with lease rights. It is our view that BLM has far more retained rights to condition development than it typically claims. But under the mandates and intent of numerous statutes (the Federal Land Policy and Management Act, NEPA, Endangered Species Act, Clean Air Act, Clean Water Act, etc., etc.), we believe BLM has a responsibility to assert that it has the maximum retained rights possible, and additionally under these statutes BLM must use this retained authority to maximize environmental protection.

Pursuant to this high level of retained rights, we believe that BLM should adopt the following as conditions for well approval in the Hiawatha Project area in order to maximize environmental protection, and we ask that BLM consider these requirements as an alternative in the EIS and to in fact adopt them in the ROD:

1. Construction of wells will not exceed a well density that would cause unnecessary or undue degradation of the public lands when also considering the cumulative effect of all other existing sources of disturbance in the area; provided, however, that if such a density would be exceeded the well may be permitted if it can be drilled directionally from an existing well pad (see element 2).

2. Wells will be drilled directionally from an existing well pad or similarly disturbed area. This element does not apply if BLM determines the distance from an existing well pad or similarly disturbed area exceeds that which can be drilled using the best available technology.

3. Existing roads will be utilized for access to well sites to the maximum extent possible, and road construction will be minimized to the maximum extent possible. BLM will determine whether it is environmentally appropriate or desirable to require construction of any roads to the levels and specifications in guidance such as the “Gold Book” and will consider options for lesser levels of roads as also provided in the Gold Book.

4. All powerlines, pipelines and other facilities will be located on existing rights-of-way to the maximum extent possible and such infrastructure will be buried underground to the maximum extent possible, unless BLM determines that burying infrastructure would cause greater environmental impacts than above-ground infrastructure. In all cases, anti-perching devices and construction techniques will be required to the maximum extent possible for all above ground structures.

5. “Closed loop” drilling fluid systems, with no reserve pit permitted, will be required to the maximum extent possible. Non-toxic drilling and fracking fluids will be required to the maximum extent possible. If fluids are generated or used during well drilling they will be disposed of off-site at a licensed facility, with the exception of produced water, which to the maximum extent possible will be disposed of by reinjection into the same formation from which the water was withdrawn, or into a formation that is as near as is possible to having the same characteristics as the source formation. Evaporation of drilling fluids and surface disposal of drilling residues following evaporation will not be allowed. During well drilling and the time any fluids remain in holding ponds the ponds will be covered with netting to prevent bird mortality. Any holding ponds necessary during drilling will be lined.

6. No flaring will be allowed except in emergency situations where necessary to protect health and safety. All dirt roads will have dust suppression actions required. Electric compressors or muffled clean-diesel or natural gas compressors will be required to the maximum extent possible. The BACT to regulate air pollutants will be required to the maximum extent possible for compressors, dehydrators, and other sources of air pollution. Car pooling to and from the well site will be required to the maximum extent possible, including at every scheduled crew change during drilling.

7. The BLM will fully utilize its authority to ensure and require that bonding is sufficient to ensure reclamation and compliance with all lease terms, stipulations, and conditions of approval before permitting the well. BLM will make determinations and increase bonds as needed to meet the requirements at 43 C.F.R. § 3104.5, and in particular will determine if the “total cost of plugging existing wells and reclaiming lands exceeds the present bond amount based on the estimates determined by the authorized officer.” 43 C.F.R. § 3104.5(b).<sup>2</sup> BLM will fully comply with Instruction Memorandum (IM) 2006-206.

Monitoring to ensure reclamation is successful will be required. Reclamation will be initiated as soon as is possible and as much of the area disturbed by well drilling and operations will be reclaimed as is possible at the earliest possible time. Initiation of reclamation will not be postponed until when operations cease. Bonds will not be released until successful reclamation has been demonstrated.

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<sup>2</sup> See also *id.* § 3106.6-2, 3161.2 (allowing increase in bonds despite posting of statewide or nationwide bonds, and requiring determination that the bond amount is acceptable); 30 U.S.C. § 226(g) (Mineral Leasing Act requires BLM to ensure bonds are adequate prior to approving an APD “to ensure the complete and timely reclamation of the lease tract) (emphasis added).

Full compliance with Executive Order No. 13112 (dealing with invasive species) will be determined and required. Any trucks or other equipment used at the drill site will be required to have been cleaned to ensure weeds are not transported onto the site.

If the well site is in sagebrush habitat, reclamation to sagebrush habitat in a reasonable amount of time will be required in the reclamation plan, including but not limited to requiring the use of containerized stock or other methods to increase the rate and success of establishment of sagebrush, and so as to meet the requirement to ensure “timely” reclamation established by the Mineral Leasing Act. 30 U.S.C. § 226(g). This provision will apply to intermediate reclamation actions as well as to final reclamation following cessation of operations.

8. Ongoing operations will be conditioned such that the minimum amount of disturbance occurs. Remote monitoring of well operations and conditions will be required to the maximum extent possible. Oil and gas will be removed from the site by pipeline and not by truck to the maximum extent possible; if such is not possible, removal of petroleum products will be done by means that require the minimum possible amount of ongoing disturbance. Noise from ongoing operations will be minimized to the maximum extent possible.

9. The visual impacts of both well drilling and the completed well and its infrastructure will be minimized to the maximum extent possible. This will be achieved by, among other things, requiring the lowest profile structures possible, use of natural topography and terrain to the maximum extent possible to reduce visual impacts, avoidance to the maximum extent possible of terrain and topography where visual impacts would be extreme (such as ridgelines), and requirements to use appropriate coloration.

10. Lighting, both during drilling and for ongoing operations, will be minimized to the maximum extent possible and legally permissible within BLM’s authority, and the use of techniques to reduce the impacts of lighting (shading or redirection of light) shall be required to the maximum extent possible, again to the extent legally permissible within BLM’s authority.

11. The minimum possible well pad size will be determined, both for initial drilling and for ongoing operations, and this size pad will be required to the maximum extent possible, considering other relevant elements of this alternative, such as piping hydrocarbons away from the well site rather than trucking them away.

12. The surface use plan of operations shall require compliance with and incorporate by reference of all applicable water pollution control requirements and permits of the Environmental Protection Agency, the State of Wyoming, and the State of Colorado, including any permits for the control of stormwater discharges.

13. All normal conditions or attributes of well approval, such as adherence to stipulations, adherence to various protections for wildlife (e.g., no drilling in crucial big game winter ranges from November 15 through April 15), acceptable 13 point surface use plans, provisions for adequate inspection and enforcement, etc. shall be part of this alternative and required as part of the conditions of approval.

14. BLM will consider and adopt the Best Management Practices shown at <http://www.blm.gov/nhp/300/wo310/O&G/Ops/operations.html> to the maximum extent possible. It will fully comply with Instruction Memorandum 2004-194.

For purposes of this alternative and wells drilled pursuant to it, the term “maximum extent possible” will mean and be determined as follows:

a. BLM will determine the level of authority retained to it to condition development of the well pursuant to the applicable lease provisions and stipulations, 43 C.F.R. § 3101.1-2, 43 U.S.C. § 1732(b), and other relevant law (see discussion above at the beginning of Section III). This determination will be documented and made public.

b. If BLM determines that it retains complete authority to condition development, BLM will require all elements of this alternative to be implemented using the best available technology to prevent unnecessary or undue degradation of the public lands.

c. If BLM determines that the lessee has been granted a property or contractual right that limits the ability of BLM to condition development, BLM will determine the extent of the limitations on its authority and require all elements of this alternative to be implemented using the best available technology that still allows the lessee to obtain a “reasonable profit” from its operations in the Hiawatha Project area as a whole and consistent with the extent of lessee’s rights and BLM retained authority and its duty to prevent unnecessary or undue degradation of the public lands. See 43 C.F.R. § 3162.2-5 (presenting the concept of “reasonable profits” as a BLM-approved standard).

In addition to the above consideration we ask that the EIS fully and carefully consider and the ROD provide for staged development of the Hiawatha Project. Phased or staged development is a concept that involves landscape-wide planning of the timing and location of development so as to prevent and mitigate environmental and societal harm. At its core, phased development entails an overarching plan of development that spreads out the harms of natural gas development over time and over a geographic area so that other uses and values of the land, including for example ranching and wildlife habitat, can be sustained both during and after the lifetime of natural gas extraction. Phased development can allow a deliberative adaptive management process, permitting strategies to be devised that prevent or reduce the detrimental effects of future development found to be irreparable or not capable of mitigation.

There are at least two means by which phased development might be implemented. First, the Hiawatha Project proponents could be allowed to develop

production in one geographic area at a time and when complete, move to another. Second corridors could be left undeveloped to allow for wildlife movement and protection.

These concepts are good places to start in developing alternative approaches for pursuing phased development for various reasons. Developing one geographic area at a time could prevent or mitigate some surface impacts. By clustering development in one geographic area, development could be planned in such a way as to utilize common infrastructure such as roads, powerlines, and pipelines.

Phased development to protect wildlife populations and habitat would need to concentrate on limiting the geographic and temporal scope of development in a given area in ways designed to leave enough habitat for species to coexist with development at each point in time during the life of the project, from drilling through extraction to reclamation.

In addition to these concepts, BLM should consider the following in developing phased development alternatives:

**1. Clean up as you go:** Operators should be required, consistent with applicable law and lease terms, to fully reclaim disturbed areas prior to moving on to the next phase of development. Phased development of this type would provide that lands would be fully reclaimed before other areas are disturbed. This would also provide adaptive management benefits in that information gained from earlier phases could be used to make subsequent phases better.

**2. Minimizing Surface Impacts by Planning for Shared Infrastructure:** BLM-approved projects and wells should try to minimize surface impacts by utilizing, wherever possible, existing infrastructure such as power lines, pipelines, compressor stations, water treatment facilities and rights-of-way.

**3. Directional Drilling:** Directional drilling should be considered in conjunction with and as a means to effectuate developing leases in phases, as well as on its own. Requiring that directional drilling be utilized where viable would reduce surface impacts while at the same time allowing for more of a lease to be developed.

**4. Plan By Management Area:** It must be emphasized that there is likely no one-size-fits-all phased development alternative that would best protect the important resources of a given area within the Hiawatha Project area. For example, important wildlife populations such as sage grouse may be concentrated in certain regions. Therefore, BLM should create specific management areas and implement different concepts of phased development to protect the resources as they vary from one area to another.

Phased development has become recognized as a requirement for BLM to fully consider. A phased development approach was recently proposed in the Seminole Road Draft EIS. In Northern Plains Resource Council v. BLM, No. CV 03-69-BLG-RWA (D. Mont. February 25, 2005) and Northern Cheyenne Tribe v. BLM, No. CV 03-78-BLG-

RWA (D. Mont. February 25, 2005) the court held that BLM violated NEPA by not considering alternatives for phased development in the context of a coalbed methane development project. In the Pinedale Anticline EIS BLM acknowledged that, “BLM can regulate the manner and pace of development” and that pursuant to Interior Board of Land Appeals decisions, “consider[ing] staggering development over time [is] an “obvious alternative.”” Pinedale Anticline Draft EIS at 2-43 (citing Wyoming Outdoor Council, 147 IBLA 105 (1998) and Powder River Basin Resource Council, 120 IBLA 47 (1991)) (emphasis supplied by BLM).

Last, BLM must carefully discuss whether and when it might seek to invoke a categorical exclusion pursuant to the Energy Policy Act of 2005 (EPAAct) for Applications for Permit to Drill (APD) that might be processed in the future. To the extent there will be no future NEPA compliance, and a categorical exclusion invoked, that compliance must be provided, in detail at a site-specific level, in the Hiawatha Project EIS.

Additionally, if one of the five categorical exclusions established in the EPAAct is used in the future to approve a well, BLM should recognize in the Hiawatha EIS that it has continuing obligations and commit to meeting those obligations in the Hiawatha Project ROD. The EPAAct is explicit that its categorical exclusion provisions apply “if the activity is conducted pursuant to the Mineral Leasing Act for the purpose of exploration or development of oil and gas.” 42 U.S.C. § 15942. Thus, if BLM invokes these categorical exclusions from NEPA compliance, it is also acknowledging that it must comply with the Mineral Leasing Act. 30 U.S.C. § 181 et seq. The EIS should recognize this.

Section 17(g) of the Mineral Leasing Act sets out important provisions that BLM must abide by in approving oil and gas wells. 30 U.S.C. § 226(g). “No permit to drill on an oil and gas lease . . . may be granted without the analysis and approval by the Secretary concerned of a plan of operations covering proposed surface-disturbing activities within the lease area.” Id. (emphasis added). Prior to approving an APD BLM must engage in an analysis of the surface-disturbing activities that would occur under the proposed plan of operations and “regulate” those surface disturbing activities as needed “in the interest of conservation of surface resources.” Id. In order to accomplish the “analysis” that is required by the Mineral Leasing Act to ensure that a plan of operations is in place to “regulate all surface-disturbing activities . . . in the interest of conservation of surface resources,” we believe the BLM will have to consider the alternative we presented above, and we ask that it do so.

In addition to requiring the above analysis, the Mineral Leasing Act, pursuant to which any categorical exclusion under the EPAAct would be pursued, also requires BLM to ensure the “complete and timely reclamation of the lease tract.” 30 U.S.C. 226(g) (emphasis added). We request that BLM document that this will indeed be the case. Moreover, the BLM should follow the detailed guidance on reclamation in its Gold Book.

For the requirement that “complete” reclamation be achieved, BLM should require the restoration of the native plant community in terms of plant species

composition, structure, and ecological function. This is what will be required for the reclamation to be “complete.” In that regard, we believe there should be at least two requirements established by the Hiawatha Project EIS and ROD: the use of containerized (i.e., already-started) stock (especially shrubs) coupled with the use of supplemental water (irrigation). Additionally, if the reclamation is to be complete in the sense of having the same ecological function as the original plant community, as required by the Gold Book, locally adapted genotypes of the plants will need to be used. Quite simply, unless there is assurance of restoration of native shrub communities there is no assurance of either complete or timely reclamation because these shrubs (especially sagebrush) are widely understood to be “keystone” species that affect and control the proper functioning of this entire ecological community.

In addition, when invoking one of the EAct categorical exclusions, BLM must nevertheless “apply appropriate mitigation and BMP’s to all permitted actions . . . .” IM 2005-247 at 2. The effect of this provision is clearly to require that the provisions in IM 2004-194 must continue to be adhered to. That IM requires that BLM “shall incorporate appropriate BMPs into proposed APDs . . . .” IM 2004-194 at 1. The BLM should recognize this in the EIS and so provide in the ROD.

Furthermore, there is no doubt that other BLM policy continues to have full applicability even if the requirement to comply with NEPA has been reduced if one of the EAct categorical exclusions apply. We believe BLM should give especially careful attention to the provisions in the Gold Book. For example, the Gold Book recognizes that construction of “lower class roads” can meet access needs while better protecting the environment. Gold Book at 19. In fact, the Gold Book is replete with guidance on how to develop more “environmentally friendly” roads, including acknowledging that non-constructed (primitive) roads may be appropriate under some circumstances. *Id.* at 19-27. The Gold Book also contains a number of other provisions and considerations for protecting the environment that establish that the BMPs in the alternative discussed above are reasonable and worthy of full consideration by the BLM. *See id.* at 39-41 (discussing, among other things, noise control and protection of visual resources).

Last, we would note that the Federal Land Policy and Management Act provides that BLM “shall allow an opportunity for public involvement and . . . shall establish procedures . . . to give . . . the public adequate notice and an opportunity to comment on and participate in the formulation of . . . programs relating to the management of the public lands.” 43 U.S.C. § 1712(f). Thus, in addition to engaging in the analysis required by the Mineral Leasing Act if an EAct categorical exclusion is invoked, BLM must also provide for public involvement and comment on APDs. The EIS and ROD should acknowledge this and so provide.

#### **IV. This Amazing Landscape Must Be Protected**

The area where the Hiawatha Project would be build is visually and ecologically stunning, and BLM should recognize and seek to protect this through the Hiawatha Project EIS. It is home to or immediately adjacent to wilderness quality lands

surrounding the Adobe Town Wilderness Study Area. The Vermillion Basin is an austere moonscape that is incredibly striking, and is home to proposed wilderness areas. Lookout Mountain, Diamond Mountain, and Kinney Rim, all amazing vantage points with sweeping 100 mile views, ring this area; their views are largely defined by what lies below in the Hiawatha Project area. The Irish Canyon Area of Critical Environmental Concern is nearby. The EIS must recognize this amazing landscape, recognize its grandeur. The ROD must ensure it is protected.

More generally, we ask that the BLM consider in the EIS the question of whether “we are losing the last best places.” This area, northwest Colorado and south-central Wyoming, has historically been one of the most remote and wild areas in the Lower 48. The road sign as one leaves Maybell, Colorado heading out in this direction on Colorado Route 318 reads “Next Gas 100 Miles.” There are not many places where you can read a sign like that. Not many places where you can get that “uh oh” feeling. Ask (or care), “Do we have any water?” BLM should recognize this uniqueness and address it in the EIS. While once it may have been viable to claim “there’s lots more where that came from” and therefore the landscape was not so special or unique, that view is not longer viable given the immensity and ferocity of development forces that are at work. To address this issue properly, we believe BLM will need to hire a professional writer or a poet, and we ask that it do so. This issue is at the core of much of the interest in this project, and deserves the utmost attention.

## **V. Purpose and Need**

We ask that the purpose and need for this project be carefully defined and that it guide the EIS. Specifically, we ask that the purpose of this project not be defined so as to allow lease holders to exercise their lease rights, for example. This is far too narrow a definition of what is being sought to be achieved here. It was unfortunately on display in the definition of the purpose and need in the Draft EIS for the Atlantic Rim Project, and we ask that that myopic view not be repeated here. As discussed above, BLM retains many and substantial rights even after a lease is issued, and it operates under substantial obligations to protect the natural environment pursuant to literally dozens of environmental statutes. That broader framework cannot be lost sight of by defining the purpose and need for this project in an unduly constrained way. At a minimum we ask that BLM provide a full explanation for its definition of the purpose and need of this project, and we specifically ask that that discussion address the issues raised in Part III of these comments.

It is our view that the purpose and need for this project should be stated like this: “The purpose and need for this project is to leave the existing landscape in as unimpaired and unchanged condition as possible while allowing holders of oil and gas leases to develop those leases to the extent permitted by their leases and other law.” We believe maximizing environmental protection while still allowing development is clearly the overall “take home message” from federal law and policy; any definition of the purpose and need being just to allow for exercise of lease rights is far off the mark.

Thank you for considering these comments, and we look forward to remaining involved in this process.

Sincerely,

Bruce Pendery

Enclosures