

NON-SIGNIFICANT ISSUES RAISED DURING THE PUBLIC SCOPING PROCESS

As discussed in Section 1.5, certain issues identified in conjunction with project scoping were determined not to be “significant issues related to the Proposed Action” (40 CFR 1501.7) because they are not potentially affected or impacted by the proposal. Those issues brought forth during public scoping and reasons for eliminating that particular issue from consideration in this analysis are stated below.

Conformance with LUP

On April 15, 2003 the Interior Board of Land Appeals issued a decision (158 IBLA 384), Wyoming Outdoor Council, et al, in which they determined that the Great Divide Resource Management Plan (RMP) and subsequent documentation failed to identify any of the relevant areas of environmental concern associated with coalbed natural gas development, failed to discuss reasonable alternatives to the proposed action and did not satisfy BLM’s NEPA obligation. In the IBLA ruling they reversed the Acting Director’s decision and remanded the matter to BLM for further appropriate action. The Rawlins Field Office responded to the IBLA remand by preparing a new Documentation of Land Use Plan Conformance and NEPA Adequacy (DNA) to determine if exploration and development of methane gas from coal reservoirs is within the broad impacts predicted for oil and gas development described in the current land use plan. The DNA was transmitted to the BLM Wyoming State Office on July 29, 2003, and confirms that the exploration and development of methane gas from coal reservoirs is in conformance with the Great Divide RMP.

Geologic Hazards (earthquakes)

The Wyoming Earthquake Database lists four earthquakes having occurred in Sweetwater County since 1986 with a magnitude greater than 2.5. Two of these quakes occurred in northeastern Sweetwater County in May of 2000 just south of Bairoil, while the remaining two quakes occurred in the southwestern portion of the county in an area generally south of Little America in November of 1998 and January of 2000 respectively (WRDS 2004).

According to Case (1999), 31 earthquakes have occurred in Sweetwater County between 1888 and 1995, with these various quakes ranging in magnitude from 2.2 to 5.3 on the Richter scale. One of the most recent earthquakes occurred on February 3, 1995, with an epicenter located near Little America, Wyoming. The quake had a magnitude of 5.3, was felt throughout the state and as far away as Salt Lake City, Utah and was associated with the collapse of a shaft in an active trona mine. Fault zones in the geographic region have been recurrently active for the past 20 million years; however, their activity is poorly defined or nonexistent in recent times (Case *et al* 1995). Known or suspected active faults are located on the northern and southern boundaries of Sweetwater County (Case and Green 2000).

Considering the relatively stable nature of the Great Divide/Green River Basin(s) and the fact that no devastating earthquakes have been recorded in Sweetwater County in over 115 years, the likelihood of a major earthquake occurring within the general area is unlikely, as is the probability of a quake that could/would cause extensive damage to any infrastructure constructed in conjunction with the Proposed Action.

Impacts of Noise

The project area is located in a very-sparsely populated area which is subject to modest sound disturbances associated primarily with jet aircraft overflights, localized vehicular traffic on existing road networks within the area and, most notably, the wind. Local increases in noise may be expected as a result of exploration activities associated with the pilot project, but these impacts will typically be very short-term in nature and would occur primarily during active construction, drilling and completion operations. The EPA has established 55 decibels (dBA) as the maximum noise level that does not adversely affect public health and welfare. The State of Wyoming has not adopted any regulations concerning quantitative noise levels.

Considering that the project area is located in a very sparsely populated area of Sweetwater County, any noise generated by activities associated with the Proposed Action during peak activity periods would be dispersed and short-term in nature and would likely be unnoticed by the relatively few visitors to the area. In this regard, noise impacts have been analyzed for numerous CBNG projects throughout southwestern Wyoming in recent years. Consequently, the reader is directed to one or more of these documents for additional information in this regard:

- Decision Record, Finding of No Significant Impact and Environmental Assessment for Lower Bush Creek Coal Bed Methane Exploratory Pilot Project. Rock Springs Field Office, Bureau of Land Management. August 2003.
- Environmental Assessment for the Atlantic Rim Interim Drilling Project, Doty Mountain POD, Carbon County, Wyoming. Rawlins Field Office, Bureau of Land Management. October 2003.
- Environmental Assessment for the Atlantic Rim Coalbed Methane Project, Brown Cow POD, Carbon County, Wyoming. Rawlins Field Office, Bureau of Land Management. December 2003.
- Decision Record, Finding of No Significant Impact and Environmental Assessment for the Cooper Ridge Shallow Gas Exploration and Development Project. Rock Springs Field Office, Bureau of Land Management. December 2003.

Impacts to Social/Economic Values

Neither the economy of Sweetwater County nor the quality of life for the residents thereof will be adversely affected by the Proposed Action. As described in Chapter 2.0, additional oil/gas exploration and development activity in the SLPA would not result in an increase in the local workforce, with a concomitant burden on the resources of Sweetwater County and the infrastructure thereof. In point of fact, implementation of the Proposed Action would ultimately have a positive impact on the economy of Sweetwater County through increased revenues generated by additional hydrocarbon production from leases within the project area should commercial CBNG production be established from any/all of the proposed wells proposed in conjunction with this pilot project.

As this is a pilot project, it would be difficult at best to predict the financial revenue to Sweetwater County, should commercial production result from any/all of the wells proposed in conjunction with

said pilot project. Considering that no commercial production has been reported to date from the three initial wells completed by Hudson Group, LLC in the Scotty Lake coals, the task of predicting potential revenue (positive economic benefit) becomes highly speculative at best.

Migration of Methane

Coalbed natural gas production as proposed in the SLPP would occur from coal-bearing seams within the Fort Union Fm at depths ranging between 2,000 feet and 5,000 feet below the natural ground surface with an overburden consisting of sandstones, siltstones and shales. Considering that the Scotty Lake coal sequence represents a confined reservoir having a minimum of 2,000 feet of overburden, it is extremely unlikely that there would be any significant migration of methane to the surface resulting from the depressurization of the targeted coal-bearing seam in conjunction with this pilot project (see Appendix D). Furthermore, completion techniques to be utilized in conjunction with this pilot project would be designed and implemented in order to minimize the potential for communication with the surface (BLM 2003a).

Potential for Depletion of Colorado River System Waters

The sub-surface and surface water resources in the Great Divide Basin are hydrographically closed (see Section 3.5.1 and Appendix D). Consequently, the project proposal has no potential to impact these resources (BLM 2003a).

Potential for Impacts to Biological Soil Crusts

Biological soil crusts are common, but not widespread, in semiarid and arid environments. Crusts in southwest Wyoming appear to be confined to protected or inaccessible areas that probably have not been disturbed by heavy, sustained livestock use (both historic and contemporary), unlike the Colorado plateau where crusts are a prominent feature. While no crusts have been observed in the project area during past field reviews, this does not preclude their presence. However, the fact that these crusts may exist in the project area does not limit development or other surface disturbing activities, as they would be salvaged in conjunction with topsoil stripping associated with well pad, access road, and pipeline right-of-way construction. The salvaged topsoil would ultimately be placed back on the reclaimed portions of the disturbed area and re-seeded with native species as directed by the RFO, with these reclamation activities occurring as soon as practical following the initial surface disturbance in an attempt to maintain soil microbe viability and enhance reclamation success (BLM 2003a).

While it is highly unlikely that construction activities associated with the Proposed Action would be located on contiguous or conterminous areas of biological soil crusts, efforts would be made to avoid the crusts should such an area be identified.

Risk to Ground Water from Hydraulic Fracturing

Fresh water aquifers utilized for water supplies within the overall project area are much nearer the surface than the Scotty lake coals and are separated by hundreds, if not thousands, of feet of sedimentary rock including layers of sandstone, siltstone, and shale. The hydraulic fracturing of the

targeted coal-bearing seams will be conducted with the best technological methods designed to protect against risks to other aquifers. As indicated in Section 2.2.4, hydraulic fracturing conducted in conjunction with the SLPP would be conducted with fresh water and/or freshwater/sand and would not involve any chemical agents that could be considered as a contaminant.

In this regard, the Environmental Protection Agency (EPA) has recently released a draft report addressing the potential for impacts to underground sources of drinking water by the hydraulic fracturing of coal bed natural gas reservoirs (EPA 816-D-02-006). Based upon information collected during the Phase I investigation, the EPA has preliminarily found that “the potential threats to public health posed by hydraulic fracturing of CBNG wells appear to be small and do not justify additional study” (BLM 2003a). Please refer to Section 2.2.4 of this document for additional information concerning hydraulic fracturing techniques.

Subsidence

Subsidence typically occurs when solid material is extracted (e.g., coal or trona). While it may be possible for subsidence to occur, the probability of subsidence occurring is extremely remote considering the depth of the targeted coals, the fact that no solid material is being removed from the coal-bearing seam, combined with the structural integrity of the overlying formations (sandstones and shales). Finally, the pilot project only affects a very small portion of the Scotty Lake coal, further reducing the potential for subsidence to occur.

Underground Coal Fires

Spontaneous combustion of the coal seam following depressurization (dewatering) is not likely considering the depth of the coal and the fact that the coal-bearing seam does not outcrop. As a consequence, sufficient oxygen is unavailable for spontaneous combustion. Furthermore, it should be noted that depressurization of the coal does not result in the removal of all entrained water therefrom. A sufficient quantity of water will be removed from the targeted coal-bearing seam to lower the hydrostatic pressure to the point where gas will desorb from the coal and flow to the surface via the well bore (see Section 2.2.4). Once this equilibrium has been reached, water production would decrease dramatically. Based upon studies conducted in conjunction with the Powder River Basin Oil and Gas EIS (ARI 2002, BLM 2003c), approximately 20% of the water in the coal aquifer is removed in order to facilitate desorption, leaving 80% of the entrained water in place.

Use of hazardous/toxic materials in drilling/completion operations

As indicated in Section 2.2.10, no hazardous or toxic materials will be utilized in drilling or completion operations.