

SUMMARY OF THE PINEDALE ANTICLINE EIS PROPOSED ACTION AND ALTERNATIVES

The Pinedale Anticline Project Area (PAPA) is located in Sublette County, Wyoming, as shown in Figure 1. The area is located within the BLM Pinedale Field Office Area. The PAPA analysis area encompasses approximately 197,345 acres of federal, State, and private lands.

Alternatives Considered

The Pinedale Anticline Natural Gas Exploration and Development Project EIS analyzed three alternatives. They are as follows:

1. Project Wide Exploration/Development Scenario (exploration and development activities spread generally across all portions of the PAPA);
2. Anticline Crest Exploration/Development Scenario (exploration and development confined to the crest of the anticline and a few hot spots); and
3. No Action Exploration/Development Scenario (no further exploration or development allowed in the PAPA).

Also considered were 2 potential levels of development - 500 and 700 well pads¹ developed in the PAPA over the next 10 to 15 years. The impact of each of these potential levels of development was evaluated for each of the exploration/development scenarios listed above.

Two mitigation alternatives are also addressed - the Standard Stipulations (SS) and Resource Protection (RP) alternatives. The SS Alternative describes the impacts associated with imposing mitigation measures and practices common to oil and gas development elsewhere on Federal lands and minerals in Wyoming. The RP Alternatives make recommendations that exceed the standard mitigation measures currently used in the state and was designed to specifically address the manner and pace of development in the PAPA. In some portions of the PAPA, the RP Alternatives recommend reduced surface disturbance and human presence to minimize impacts to sensitive environmental resources. Two 2 options were identified for achieving a reduced surface disturbance and human presence - pad drilling and centralized production facilities. The RP Alternatives consider the relative impacts associated with adopting these mitigation alternatives on just Federal lands and minerals as well as on all lands and minerals in the PAPA.

In addition to gas exploration and development activities within the PAPA, the proposal also describes construction and operation of sales pipelines. These pipelines would transport gas from the project area to existing pipeline hubs in southwestern Wyoming. Because existing pipeline capacity from the project area is insufficient to transport the quantities of gas which may be produced from the PAPA, these sales pipelines and their associated compression are considered connected actions to continued exploration and development. Alternative routes for the sales gas pipeline corridor around the Jonah II Field were also analyzed. Several route deviations from the existing sales pipeline corridor were analyzed to safely circumvent existing pipelines within the Jonah II Field. A field office, proposed by BP Amoco in the southern portion of the PAPA, was also addressed.

The EIS did not evaluate the typical "proposed action"² found in many of BLM's previous southwest Wyoming NEPA documents. Insufficient information was available to understand exactly how the Pinedale Anticline should ultimately be developed (i.e., it was not possible to predict where the actual productive zones are located and what well density would be necessary to drain the reservoir(s) or adequately estimate ultimate production). However, the operators believed that at least 8 and as many as 16 bottomholes per section may be required to adequately drain productive zones which may be discovered in the future.

At the time of DEIS preparation, most wells in the PAPA had been drilled on the crest of the anticline where the highest concentrations of gas are expected to be found. Because so little of the PAPA has been explored and much remains to be understood about the ability of the anticline to economically produce natural gas, the operators were unable to develop a detailed proposed action that specifies locations of wells and associated facilities (e.g., roads, gathering pipelines, etc.). The lack of available information to quantify development potential required the EIS to consider a wide range of exploration/development scenarios and potential levels of development. This range included considering the impacts from wide spread development across the full extent of the PAPA to no further additional exploration or development.

Regardless of the development uncertainties, the BLM

¹ The term "well pad" is used consistently in this EIS to identify the surface location from which single or multiple bottomholes or wells may be drilled. Wells refer to well bores, several of which may be drilled from a single well pad.

² The proposed action is typically defined as what the project proponents propose to do. For oil and gas projects this typically includes drilling of a specific number of wells during a specific time frame based on a well-defined understanding of the area's geology.

initiated early preparation of this EIS because the PAPA contains a number of sensitive environmental resources (see Chapter 3) that need to be identified and protected (to the extent allowed by law) before further exploration or extensive development can proceed. In addition, NEPA requires early and continued public participation. Finally, exploration and development in the PAPA has raised concerns among the public and a number of regulatory agencies.

No Action Alternative

The "*No Action*" alternative, would allow the on-going natural gas production activities to continue by the BLM in the project area, but the *SS and RP Alternatives* would not be allowed. Transport of natural gas products would be allowed from those wells within the analysis area that are currently productive. Cumulative disturbance with the implementation of the No Action alternative would be limited to the existing unreclaimed disturbance area plus unreclaimed disturbance areas associated with potential development on private and State lands.

Analysis of the No Action Alternative provides a benchmark of existing environmental impact against which the decisionmaker can compare the environmental effects from the *SS and RP Alternatives*. The No Action Alternative assumes no further authorizations for development would be granted on public lands within the project area. It would deny the actions proposed as well as any alternatives. Natural gas recovery would be limited to that presently being produced within the project area, and continued use and maintenance of access roads and pipelines within the project area.

As explained in the EIS, an oil and gas lease grants the lessee the right and privilege to drill for, mine, extract, remove, and dispose of, oil and gas deposits in the leased lands, subject to the terms and conditions incorporated in the lease. On land leased without a No Surface Occupancy stipulation, the Secretary of the Interior cannot deny the permit to drill but can only impose reasonable mitigation measures. In the absence of a No Surface Occupancy stipulation covering the entire lease, restrictions based on oil and gas lease operations must be "reasonable" and cannot directly or indirectly prohibit the development of the lease. Although an individual APD can be denied, the right to drill and develop somewhere on the leasehold cannot be denied by the Secretary. To deny all activity, absent a no surface occupancy stipulation on the lease, may constitute a breach of contract and violate an operator's right to conduct development activities on the leased lands. Authority for complete denial can only be granted by Congress, which can order the lease forfeited subject to compensation.

Also, Federal Regulation 43 CFR 3162 - (*Requirements for Operating Rights Owners and Operators*) further describes that which may constitute reasonable restriction in the development of a lease. The regulation states: "The operating rights owner or operator, as appropriate, shall comply with applicable laws and regulations; ... These include, but are not limited to, conducting all operations in a manner ... which protects other natural resources and environmental quality; ... and which results in maximum ultimate economic recovery of oil and gas with minimum waste"