UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Farmington District
Farmington Field Office
6251 N College Blvd., Ste. A
Farmington, NM 87402

DECISION RECORD
for the
ROSA UNIT 03, 04, 05, AND 06 NATURAL GAS WELL PADS AND WATER MANAGEMENT SYSTEM

NEPA No. DOI-BLM-NM-*FO10-2012-0402-EA*

I. Decision

I have decided to select Alternative B for implementation as described in the December 11, 2012 *ROSA UNIT 03, 04, 05, AND 06 NATURAL GAS WELL PADS AND WATER MANAGEMENT SYSTEM EA*. Based on my review of the Environmental Assessment (EA) and project record, I have concluded that Alternative B was analyzed in sufficient detail to allow me to make an informed decision. I have selected this alternative because the proposed treatments will allow WPX Energy access to their existing mineral rights.

The need for the action is to meet the BLM's obligation to allow economic extraction, in an efficient and environmentally compatible manner of the recoverable oil and natural gas reserves known to exist in the valid mineral leases issued to WPX Energy, as administered by the BLM. The BLM's policy is to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs in accordance with BLM's multiple-use mandate under the Federal Land Policy and Management Act of 1976 (FLPMA). The Mineral Leasing Act of 1920, as amended (30 USC § 181 et seq.), authorizes the BLM to issue oil and gas leases for the exploration of mineral resources and permits the development of those leases. The need for the action is established by the BLM's authority under the Mineral Leasing Act; the Mining and Minerals Policy Act of 1970 (30 USC § 21 et seq.); the FLPMA (43 USC § 1701 et seq.); the National Materials and Minerals Policy, Research, and Development Act of 1980 (30 USC § 1601 et seq.); and the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (30 USC § 181 et seq.).

II. Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed activities documented in the EA for the ROSA UNIT 03, 04, 05, AND 06 NATURAL GAS WELL PADS AND WATER MANAGEMENT SYSTEM. I have also reviewed the project record for this analysis. The effects of the proposed action and alternatives are disclosed in the Alternatives and Environmental Consequences sections of the EA. I have determined that the construction and drilling of seven horizontal wells on four well pads, two fluid management pits, and a subsurface waterline to allow WPX Energy access to their existing mineral rights as described in the EA will not significantly affect the quality of the human environment. Accordingly, I have determined that the preparation of an Environmental Impact Statement is not necessary.

III. Other Alternatives Considered

Under Alternative C, WPX Energy would directionally drill 22 wells from six well pads. WPX Energy would develop the Middle Mesa portion of the Rosa Unit consistent with the existing lease rights and current NMOCD spacing requirements. WPX Energy would develop the Basin Mancos pool at 40-acre spacing in the project area using vertical/directional (non-horizontal) drilling. No construction or drilling would occur during the Middle Mesa Wildlife SDA winter closure. Standard COAs and any additional mitigation measures identified during the on-site evaluations would be implemented.

The relationship between a horizontal well and directional/vertical well is not one-to-one in terms of formation contact or volumetric extraction. Specifically, under the Proposed Action (Alternative B), the purpose-built rig would drill downward generally in a vertical direction to the target formation (point of entry) at which point the drill bore would extend horizontally across the formation for a distance of up to 7,000 feet. This consistent contact with the formation is what allows for greater natural gas extraction. Under Alternative C, however, existing rigs from the San Juan Basin fleet would be used to vertically/directionally drill to the target formation. With directional drilling, the drill bore crosses the formation on a nearly vertical plane mainly encountering the vertical extent of the producing formation. Figure 2 4 illustrates the difference in horizontal well and vertical/directional bores. To date, no reservoir drainage areas in excess of 10-acres have been observed by WPX Energy in Rosa Unit vertical Basin Mancos wells.

Additionally, with the adoption of Order No. R-13499, Case No. 14744, by the Oil Conservation Commission, the spacing of horizontal versus vertical wells complicates direct comparison (refer to Section 1.1). A horizontal well is not confined to a single spacing unit when drilled within a designated Project Area, whereas a vertical well is confined to 8 wellbores per 320 acre spacing unit. The pool rules for vertical development restrict the number of wells that can be drilled in a spacing unit and also restrict their location according to setback requirements.

Taking these issues into account, WPX Energy developed a projected number of wells/pads needed for comparison with Alternative B, based on extracting natural gas resources from the same area. The projected development assumed that existing pads on Middle Mesa have an average of two wells on location. It was also assumed that four directional wells per pad could be drilled from one existing location. Current technology limits directional drilling to a reach of 1,500 feet.

Under Alternative B, the seven proposed horizontal bores transect a total of 31 quarter-quarter sections. Each quarter-quarter section correlates to a 40-acre spacing unit where one vertical/directional Basin Mancos well could be drilled. However, of the 31 40-acre spacing units, five would not be accessible under Alternative C given the 1,500-foot drill reach and setbacks from Navajo Lake. Additionally four of these units have already been developed. Therefore, under Alternative C, 22 wells at 40-acre spacing could be developed using vertical/directional drilling. Because it is assumed that all well pads could be twinned with existing locations and that up to four wells could be drilled from one well pad, six well pads would be needed under Alternative C to attempt to access the same reservoir area as Alternative B (Figure 2 4).

However, under current spacing orders and due to different extraction techniques, Alternative C would drain approximately 25 percent of the natural gas volume as compared to the amount drained under Alternative B. This assumption is based on data acquired from previously drilled vertical and horizontal Mancos wells in the Rosa Unit. The exact surface locations of well pads under Alternative C cannot be determined at this time, as that would require extensive on-the-ground surveying and analysis.

Based on previous development, the total surface disturbance associated with each well pad would be about 4.29 acres. After interim reclamation, approximately 0.43 acre of long-term disturbance remains for well operation for the first well. Given a 50-foot surface offset between each well head on a location, each additional well would result in 0.16 acre of long-term

disturbance. Assuming that an average of two wells are located on each existing location, the four new Mancos vertical/directional wells would result in approximately 1.23 acres of long-term disturbance per well pad. Refer to Table 2-4 for a summary of disturbance under Alternative C. Pg 21 ROSA UNIT 03, 04, 05, AND 06 NATURAL GAS WELL PADS AND WATER MANAGEMENT SYSTEM EA.

IV. Rationale for the Decision

Pursuant to 40 CFR § 1508.20 and 1502.28, this EA tiers to the information and analysis contained in the 2003 Farmington Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS; USDI/BLM 2003a). The Proposed Action would be in conformance with the oil and gas leasing and development management actions in the RMP/ROD signed in September 2003 and updated in December 2003 (USDI/BLM 2003b). A reasonably foreseeable development scenario (RFDS) was developed for the 2003 RMP that estimated foreseeable oil and gas development in the New Mexico portion of the San Juan Basin, beginning in January 2002 and lasting for a 20-year duration. The RFDS also contemplated that technological advances could alter development of the basin during the 20-year period. The Mancos shale reservoir was analyzed in the RFDS as an emerging gas play over a large part of the basin where it had not been previously developed (Engler et al. 2001). Based on the forecast in the RFDS, the 2003 RMP estimated and analyzed long-term environmental impacts that would result from several alternative development scenarios. The 2003 ROD stipulated that companies applying for APDs may be required to evaluate the use of new technology such as directional drilling from existing pads and other techniques in order to reduce surface disturbance with its consequent environmental impacts (USDI/BLM 2003b, page 4). The PRMP/FEIS and RMP/ROD are available for review at the FFO, New Mexico, or electronically at http://www.nm.blm.gov/ffo/ffo_home.html.

This EA also tiers to the Environmental Assessment and Decision Record for the Williams Four Corners, LLC Middle Mesa Plan of Development (USDI/BLM 2011a) and incorporates by reference (40 CFR § 1502.21) information and analysis from the Environmental Assessment of the Criteria and Impacts of Granting Exceptions to the Seasonal Closure Periods in Designated Wildlife Areas (USDI/BLM 2008a), both of which are on file at the FFO.

Oil and gas development is recognized as an appropriate use of public lands in the FFO planning area (USDI/BLM 2003b). The RMP adheres to the federal mandates contained in the Energy Policy and Conservation Action (42 USC § 6217) and Executive Order 13212, which direct federal land managing agencies to expedite the production of the federal mineral estate for the development of reliable domestic sources of energy (USDI/BLM 2003b, pages 1 and 11).

Other authorizing actions (federal, state, or local permits, licenses, or other consultation requirements) are discussed in Appendix A of the EA.

I have determined that the activities described in the proposed action will not adversely affect or cause loss or destruction of scientific, cultural, or historical resources, including those listed in or eligible for listing in the National Register of Historic Places (40 CFR 1508.27(b)(8)). Cultural resource surveys of the entire area of potential affect for the proposed well pads and the south fluids management pit was surveyed between March 3 and May 25, 2011, by LAC at a BLM Class III level (100 percent) (LAC 2011-16 No. 1; BLM 2012(II)028F). The entire area of potential effect for the proposed water line, bore entry/exit points, and the north fluids management pit were surveyed between November 28, 2011, and April 13, 2012, by LAC at a BLM Class II level. (LAC 2012-16; BLM 2012(III)052F). Effects to significant cultural sites would be avoided by adherence to BLM/FFO cultural resources requirements, based on the archaeological survey report recommendations and the results of the BLM field check. These requirements would be detailed in the Cultural Resource Record of Review, attached to the COAs in each APD. (Pg 57-ROSA UNIT 03, 04, 05, AND 06 NATURAL GAS WELL PADS AND WATER MANAGEMENT SYSTEM EA.)

The proposed activities are not likely to adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (40 CFR 1508.27(b)(9)). The project area does not contain any known populations or designated critical habitat. (Pg 68 ROSA UNIT 03, 04, 05, AND 06 NATURAL GAS WELL PADS AND WATER MANAGEMENT SYSTEM EA.)

V. Public Involvement

The BLM/FFO Interdisciplinary Team was integrally involved in the internal scoping to identify potential issues, to understand the proposal, develop the purpose and need, and develop a range of alternatives. WPX Energy presented a preliminary proposal to the BLM Interdisciplinary Team on February 6, 2012. An internal scoping report was developed based on Interdisciplinary Team input.

For this analysis, the BLM/FFO Interdisciplinary Team also considered comments from external scoping conducted for the Middle Mesa POD EA (USDI/BLM 2011a). Issues identified during public scoping included analyzing the reasonably foreseeable air quality impacts of implementing the Middle Mesa POD, the consideration of alternatives in that the POD did not analyze a No Action Alternative that prescribed no action, and that the unique impacts of horizontal shale gas drilling were not analyzed (WildEarth Guardians and San Juan Citizens Alliance 2012).

On September 5, 2012, the BLM/FFO and the U.S. Bureau of Reclamation (USBR) Western Colorado Area Office entered into a Memorandum of Understanding (MOU) establishing a cooperating agency relationship for the purpose of preparing this EA. The BLM is the Lead Agency responsible for this EA and the Decision Record. The USBR is recognized to have special expertise concerning issues or project components that may impact the integrity of Navajo Reservoir, or the operation and maintenance of Navajo Reservoir.

The preliminary EA was posted on the BLM/FFO web site on September 12, 2012, for a 30-day public comment period. A total of two comment letters were received. A thorough review of the comments was conducted and each carefully considered and addressed. Final comment resolution included the BLM/FFO Interdisciplinary Team to ensure that all comments were captured and that the response was appropriate.

VI. Administrative Review and Appeal

Under BLM regulations, this Decision Record (DR) is subject to administrative review in accordance with 43 CFR 3165. Any request for administrative review of this DR, with or without oral presentation, must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, 301 Dinosaur Trail, Santa Fe, NM 87508, no later than 20 business days after this DR is received or considered to have been received.

Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals, as provided in 43 CFR 3165.4.

VII. Signature

Torres

Gary Torres
Field Manager
Farmington Field Office

Date 12/17/2012