

DECISION RECORD
Anadarko Petroleum Corporation, Crazy Cat East Deep Horizontal Proposal
Environmental Assessment (EA), WY-070-EA13-028
Bureau of Land Management, Buffalo Field Office, Wyoming

DECISION. The BLM approves the Anadarko Petroleum Corporation (APC) Crazy Cat East Deep Horizontal Proposal (CCE) conceptual exploration and development plan for oil and gas well drilling, as described in Alternative B of the environmental assessment (EA), WY-070-EA13-028. This approved conceptual exploration and development plan will be available for use in processing subsequent site-specific applications for permit to drill (APDs) and associated infrastructure.

Compliance. This decision complies with:

- Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701). Interior Order 3310.
- Mineral Leasing Act of 1920 (MLA) (30 U.S.C. 181); including Onshore Oil and Gas Orders.
- National Environmental Policy Act of 1969 (NEPA) (42 USC 4321).
- Buffalo and Powder River Basin (PRB) Final Environmental Impact Statements (FEISs), 1985, 2003.
- Buffalo Resource Management Plan (RMP) 1985 and Amendments.

BLM summarizes the details of the approval of Alternative B, below. The EA includes the proposal's description and programmatic mitigation measures.

Conceptual Proposal. BLM approves the conceptual proposal for oil and/or gas wells in the 36,099-acre Crazy Cat East Proposal Area and associated facilities, which BLM may in turn use to analyze subsequent site-specific APDs:

- 36 horizontal oil and/or gas wells drilled from 24 new wells pads, more or less, respectively;
- Approximately 11 miles of new well access roads and upgrades to 8 miles of existing well roads;
- a natural gas transport and compression system consisting of approximately 44 miles of new buried gas pipelines and a centralized compressor station;
- Approximately 9 miles of new electric transmission lines consisting of 5 miles of overhead and 4 miles of buried lines;
- The concept of 7-mile of buried water pipeline to supply water from the Table Mountain site to a centralized water tap in the CCE area for hydraulic fracturing, as 1 option for water use;
- Potential installation of oil and/or water gathering systems based on well productivity.

BLM will analyze and issue findings and decisions on individual APDs prior to any construction for each well or any infrastructure; these APDs will contain specific design and construction information for each well pad, explained in well-specific Master Surface Use Plans. Due to the programmatic nature of the selected alternative, the pads and associated facilities for individual wells may differ from the estimates approved here. APC will obtain rights-of-ways (ROWs) for all associated facilities.

Limitations. There are no denials or deferrals. BLM does not approve any surface disturbing activities as a result of this decision since those require follow-on site specific applications, analysis, and decisions. Also see the programmatic mitigation measures.

THE FINDING OF NO SIGNIFICANT IMPACT (FONSI) Analysis of Alternative B of the EA, WY-070-EA13-028, and the FONSI, both incorporated here by reference, found APC's proposal for the Crazy Cat East Deep Horizontal Proposal will have no significant impacts on the human environment, beyond those described in the PRB FEIS, thus an EIS is not required.

COMMENT OR NEW INFORMATION SUMMARY. The BLM conducted internal scoping by reviewing the proposed development and proposal location to identify potentially affected resources and

land uses that were subsequently addressed in this EA. This proposed action is substantially similar in scope to other fluid mineral development the BFO analyzed during extensive external scoping for the PRB FEIS. BLM conducted external scoping of the draft EA and FONSI via a public comment period, December 21, 2012 to January 25, 2013, by sending a news announcement to media outlets in the area. The Buffalo Bulletin, Johnson County Wyoming's newspaper of record, published a story on the proposal on January 9, 2013. BLM received 3 comments that identified no new material issues - though clarified some issues, see Appendix A of this DR. Recent fluid mineral EAs BLM recently externally scoped had a similar result. External scoping of the horizontal drilling in Samson Resources EA, WY-060-EA11-181, 2011, in the PRB area received 2 comments, revealing no new issues. BLM experience in the PRB (outside of the Fortification Creek Planning Area) revealed little public input or new issue discovery other than those revealed after public scoping during development of the PRB FEIS.

DECISION RATIONALE. The decision authorizing Alternative B, as summarized above, is based on:

1. BLM and APC included applicant committed measures (EA's Appendix A) and programmatic mitigation measures (EA's Appendix D) to reduce environmental impacts while meeting the proposal's need. The PRB FEIS analyzed and predicted that the PRB oil and gas development would have significant impacts to the region's Greater Sage-Grouse (GSG) population. The impact of this development cumulatively contributes to the potential for local GSG extirpation, yet its effect is acceptable because it is outside GSG preliminary priority (core) habitat and is within the parameters of the PRB FEIS and ROD and current BLM and Wyoming GSG, mule deer, and pronghorn antelope conservation strategies. The BLM may apply site-specific conditions of approval (COAs) on receipt of future APDs for wells addressed in this proposal should additional impacts from a proposed well be identified during analysis
2. BLM adopts the US Forest Service NEPA analysis and condition of approval concerning burrowing owl conservation. BLM finds the burrowing owl habitat and conservation issues are similarly situated in the CCE area with those found in the nearby sagebrush and short grass prairie in the Thunder Basin National Grassland Land and RMP (unnumbered), 2002, 2006, pp. 1-13 to 1-22; the supporting FEIS, 2002, and its Records of Decision, 2002, p. D-15, 2006. This is the least restrictive COA for burrowing owl conservation benefiting the owl and this conceptual proposal.
3. This is a relatively small proposal encompassing 36 proposed wells, more or less, of the 3,200 oil and gas wells analyzed and envisioned in the PRB FEIS, representing 1.125% of the total and 36,000 acres of the nearly 8 million acres in the Buffalo planning area, representing 0.45% of the total. It is representative of the conditions found in the sagebrush and short grass prairie throughout most of the Buffalo Field Office planning area and the fluid mineral developments in the PRB.
4. Operators will conduct operations to minimize adverse effects to surface and subsurface resources, prevent unnecessary surface disturbance, and conform to currently available technology and practice. The proposal's technological use of directional drilling, consolidating some pads with multiple wells should minimize surface disturbances.
5. The selected alternative will help meet the nation's energy needs, and help stimulate local economies by maintaining workforce stability.
6. Operators will:
 - Comply with all applicable federal, state, and local laws and regulations.
 - Obtain necessary permits from other agencies for the drilling, completion, and production of these wells including water rights appropriations, the instillation of water management facilities, water discharge permits, and relevant air quality permits.
 - Incorporate several measures to alleviate resource impacts into future surface use plans for wells in the CCE area.
 - In their applications for permit to drill, offer water well agreements to the owners of record for permitted water wells within 0.5 mile of a federal producing well and certify that a surface access agreement has been reached with the landowners.

7. The CCE area is clearly lacking in wilderness characteristics as it is amidst oil and gas developments.

ADMINISTRATIVE REVIEW AND APPEAL. This decision is subject to administrative review according to 43 CFR 3165. Request for administrative review of this decision 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, P.O. Box 1828, Cheyenne, Wyoming 82003, no later than 20 business days after this Decision Record is received or considered to have been received. Parties 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.

For Field Manager:  _____

Date: 3/4/13 _____

Appendix A – Responses to Public Comments

Three groups offered comments to BLM’s public solicitation for comments on the draft EA and unsigned FONSI. BLM responds or provides clarification to substantive comments, below.

Anadarko Petroleum Company (APC)

1. Comment: Proposed air monitoring and installation of vapor recovery units mitigation measures are redundant to the air quality monitoring and enforcement authority under the Wyoming Department of Environmental Quality (WDEQ) with oversight by the US Environmental Protection Agency (EPA).

Response: The Crazy Cat East proposal’s air quality measures comply with the Buffalo Resource Management Plan and Amendments (RMP). The Federal Land Management Policy Act, (FLPMA) “imposes on BLM only an obligation to “provide for” compliance with applicable air quality standards, not ensure or insure it, and that WDEQ’s Air Quality Division is the entity that is responsible for regulating and enforcing compliance with such standards.” 183 IBLA 83, 94-95 (2012). BLM deleted the mitigation measure found in the EA’s Appendix D-1, ¶12, “. . . establish “baseline” air quality in the area, monitor changes and mitigate potential impacts, the operator will coordinate with the BLM to install a mobile air quality monitoring station at an approved location proximate to the Crazy Cat development area. The station will continuously monitor the primary pollutants, as listed in the EA above. Data will be reviewed quarterly for analysis of statistically significant trends.” BLM deleted the requirement for vapor recovery units from the mitigation measure found in the EA’s Appendix D-1, ¶12c.

2. Comment: There is no need for the proposed dust suppression mitigation measures.

Response: We disagree. The Crazy Cat East (CCE) EA’s dust suppression mitigation measures comply with the Buffalo Resource Management Plan and Amendments. BLM’s experience with Powder River Basin (PRB) fluid mineral development is that dust can be a material, though fugitive (transitory, elusive) localized problem. The PRB Environmental Impact Statement (PRB FEIS), p. 2-84, assumed operators would routinely apply dust mitigation measures in their own interest. BLM’s experience affirmed the practice. BLM recognizes that with an increase in truck traffic to support horizontal drilling and completion that dust may become a localized problem. Dust problems are minimized through design features such as graveling roads, avoiding terrain masking road intersections, and through reactionary treatment means noted in the EA’s Appendix D-1, ¶12, a and b, and other measures on which the operators or BLM may agree, or the BLM may require. BLM envisions that a sundry that may apply to specific problem area (intersections, rural dwelling, federal surface, etc.) for the duration of increased vehicle traffic.

3. Comment: The EA analysis did not support the proposed installation of a gas gathering system mitigation measure and the issue receives regulation from the Wyoming Oil and Gas Conservation Commission (WOGCC), the BLM Notice to Lessees 4A (NTL 4A), WDEQ with oversight provided by the EPA. The National Environmental Policy Act (NEPA) does not require agencies to address future compliance or compliance in the face of violations of law (citations omitted).

Response: The Crazy Cat East EA’s gas and flaring measures comply with the Buffalo RMP, Notice to Lessees and other rules. BLM deleted the requirement for elimination of flaring or venting by installation of a gas gathering system from the mitigation measure found in the EA’s Appendix D-1, ¶12d for the rationale found above in response #1 and comment #3, above.

4. Comment: Proposed installation of water pipelines mitigation measure and proposed use of coalbed natural gas water mitigation measure misrepresented the proposal and the site-specific planning necessary for efficient, effective, and economic project ground-truth implementation.

Response: BLM clarifies that its proposal considered that operators may use 3 permitted water sources: the Table Mountain Load Out, Culp Draw Unit, and Table Mountain Unit (TMU) #1. See the EA's Table 2.4 and subsection, Drilling and Completion Water Sources, Amounts, and Disposal. BLM clarifies that its analysis recognized that the operator's potential for installing a pipeline from Table Mountain to the Crazy Cat area was one alternative for water procurement and that other sources, to include the trucking of water the BLM analyzed were equally viable alternatives that would receive greater analysis upon receipt of site-specific APD proposals and sundries. BLM clarified the EA's subsection 4.2.3.1.3 and Appendix D-2, ¶¶13 and 14: BLM will analyze and address mitigation measures in conjunction with the site-specific proposal in manners supporting minimizing of surface disturbances.

5. Comment: Proposed reclamation mitigation measures need clarification (EA's Appendix D-1, ¶¶3, 5, 6, and 10).

Response: ¶3: The BLM provided enforceable reclamation metrics in this programmatic analysis reinforcing those found in the Buffalo RMP, the PRB FEIS ROD, and Onshore Oil and Gas Order #1.

Response: ¶5 BLM provided an enforceable metric so a created pad design does not unduly exceed the existing slope and erosion potential found on the undisturbed location or that of the location immediately adjacent to the proposed well pad. This measure supports the Buffalo RMP. BLM had no requirement in the analysis to show a NEPA significant impact to justify a mitigation measure. BLM analysis merely had to show a material issue and an impact – here the potential impact. The application of the programmatic analysis is dependent upon a site specific proposal.

Response: ¶6: Wyoming BLM's term limited reclamation potential (LRP), finds support in the Buffalo RMP and the Wyoming BLM's Instruction Memorandum-2012-32, Wyoming BLM Reclamation Policy. LRP summarizes some soil classifications under "miscellaneous areas", found in the Natural Resources Conservation Service (NRCS) Soil Survey Geographical database (SSURGO). BLM's use of the national, scientifically-based soil classifications for urban and rural land use planning, construction, and agriculture is sound: <http://www.blm.gov/nstc/Soil2007/guidance1.html>. The National Soil Survey Handbook, section f, reads; "[n]ational soil survey interpretations are nationwide in scope and application, and are mandated by federal legislation, policy, or regulation. National interpretations cannot be modified for state or regional uses because they are designed exclusively for national use across all political boundaries by NRCS and other agencies."

Response: ¶10: This supports the Buffalo RMP, the PRB FEIS ROD, Onshore Oil and Gas Order #1, and the Wyoming BLM's Reclamation Policy. BLM clarifies that it recognizes at least 3 levels of reclamation: interim or stabilization that should occur almost coincident with the surface disturbance; 180 day reclamation; and final reclamation that is appropriate with closing of or abandonment of the project, well, pad, pipeline, etc.

Powder River Basin Resource Council (PRBRC)

6. Comment: Significance of the project and need for programmatic analysis requires consolidation of all drilling proposals under an environmental impact statement (EIS) analysis and failure to analyze socio-economic impacts.

Response: BLM approved the PRB FEIS and record of decision (ROD) in 2003 and that appeal window closed soon after. The PRB ROD approved up to 3,200 deep oil and gas and 51,000 coalbed natural gas wells. Operators drilled fewer than 500 of the deep wells. This EA tiers to and supports the PRB FEIS analysis and ROD and addresses but a small part of those wells analyzed and approved under the earlier analysis. See this EA's decision rationale, #2. BLM analyzed deep oil wells as part of the PRB FEIS whether vertical, directional, or horizontal. BLM may only undertake project-level

analysis on projects pending before the agency and cannot speculate on site-specific projects and their impacts for proposals on which it has no information. BLM has no information on whether or how APC's Powder River 2D Seismic Survey will lead to site-specific proposals and has no information on PRBRC's "all three projects" to which it alluded, but did not specify. The PRBRC later wrote of and submitted exhibits covering the oil development in the Bakken area of North Dakota – drawing the analogy that this Crazy Cat East proposal was similar – when in fact the proposal represented in this EA is a fraction of the PRB oil and gas drilling or of that found in the Bakken.

7. Comment: The EA did not disclose and analyze chemicals used with hydraulic fracturing, flowback water and water injection, water transport and disposal, and water quantity and quality impacts.

Response: The BLM may rely on other regulatory agencies, here the WDEQ with oversight provided by the EPA and the WOGCC to regulate the chemicals and water quality used in hydraulic fracturing operations and need not analyze non-compliance; 183 IBLA 83, 94-95 (2012) and Powder River Basin Resource Council, 180 IBLA 32, 57 (2010).

8. Comment: The EA did not consider impacts related to induced seismicity.

Response: The CCE EA's analysis supports the Buffalo RMP, the Wyoming BLM's State Director Review-2013-005, pp. 12-13. and the Council on Environmental Quality's rule that the analysis address a substantial environmental question of material significance as opposed to amassing needless detail; Section 102(2)(c) of NEPA, and 40 CFR 1500.1(b).

9. Comment: The EA did not consider impacts related to sand mining for hydraulic fracturing.

Response: Sand mining was not part of the project proposal, nor implied from the project proposal. NEPA bars the BLM from speculating. The industry practice in the PRB is importing sand that passes industrial specifications and there is no evidence of industry changing that practice.

10. Comment: The EA did not disclose reclamation costs or bonding requirements.

Response: BLM's CCE EA supports its Buffalo RMP which addressed reclamation and bonding. See also, Onshore Oil and Gas Order #1, VI; and 43 CFR 3814.1

11. Comment: The EA did not properly analyze flaring and other air quality impacts.

Response: The BLM Notice to Leases 4A (NTL 4A), WOGCC, and WDEQ with oversight provided by the EPA regulate flaring and air quality impacts. BLM may rely on the regulatory authority of other agencies and need not analyze non-compliance.