



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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FINDING OF NO SIGNIFICANT IMPACT Bureau of Land Management Rock Springs Field Office

DEC 19 2013

Project Title: Monell-Arch Units Oil and Gas Development

EA Number: WY-040-EA13-127

Location of Proposed Action: Sweetwater County, Wyoming, portions of Townships 18N and 19N, Ranges 98W and 99W.

Applicant: Anadarko Petroleum Corporation

BACKGROUND

Anadarko Petroleum Corporation (APC) proposes to develop new oil and gas wells in the Monell and Arch units, approximately 31 miles east of Rock Springs in Sweetwater County, Wyoming. The Bureau of Land Management (BLM) Rock Springs Field Office (RSFO) posted a public scoping notice on the BLM website in October 2012, initiating the 30-day public scoping period. APC currently holds all leases and operates 217 active wells in the Monell and Arch units. The project area consists of approximately 22,657 acres on public, state, and private land, distributed in a checkerboard pattern.

Under the Proposed Action, APC will develop up to 125 wells over 9 years: 105 oil wells, 18 carbon dioxide injector wells and 2 water injection wells. The total well life would be approximately 30 years. Drilling operations would utilize a combination of vertical and directional techniques, as appropriate, and all producing wells would be hydraulically fractured.

The Environmental Assessment (EA) was posted on the website for 30 days. As a result of the public comments, clarifications and limited changes to the EA were incorporated. An appendix is included in the EA summarizing public comments and BLM responses.

FINDING OF NO SIGNIFICANT IMPACT

Based upon the information contained in the Monell-Arch Unit Oil and Gas Development Environmental Assessment (EA) (WY-040-EA13-127) and all other information available to me, it is my determination that: (1) the implementation of the Proposed Action will not have significant environmental impacts beyond those already addressed in the Green River Resource Management Plan (GRRMP). The Record of Decision for the GRRMP was signed August 8, 1997; (2) the Proposed Action is in conformance with the Resource Management Plan (RMP); and (3) the Proposed Action does not constitute a major federal action having a significant effect on the human

environment. Therefore, an environmental impact statement is not necessary and will not be prepared.

The Proposed Action has been designed to avoid or minimize environmental impacts to the extent feasible. The following mitigation measures have been identified for the Proposed Action:

- In accordance with the BLM's procedures for surface-disturbing actions in formations with a high potential for paleontological resources, highly sensitive areas would be monitored during construction by a qualified paleontologist with a permit issued by the Wyoming State Office of the BLM. Should fossil materials of known or suspected scientific significance be encountered during excavation on the access roads, drill pads, or associated mud pits, the operator would stop work immediately in the vicinity of the discovery and the BLM Authorized Officer would be contacted. Activities would be redirected until the BLM Authorized Officer can assess the situation and advise on mitigation measure requirements before surface disturbing operations can continue.
- No surface disturbance or disruptive activities would be allowed within 0.25 mile of any occupied or undetermined greater sage-grouse lek from March 1 through July 15.
- A 1-mile controlled surface use buffer and seasonal restrictions (February 1-July 31) would be established for active ferruginous hawk nest sites located within project disturbance areas.
- If active mountain plover nests are located in suitable habitat near project disturbance areas, a 0.25-mile buffer would be established. The seasonal restriction would be April 10 through July 10, if nests are observed in disturbance areas.
- No surface disturbance activities would be allowed within crucial winter/yearlong big game range from November 15 through April 30.
- Potential water quality and channel alteration impacts to streams would be avoided by implementing a 500-foot buffer distance from the edge of wetland/riparian areas and perennial streams. Surface disturbance could be allowed within this buffer with adequate measures to ensure that no runoff from disturbed areas entered the streams or wetland/riparian areas were not affected. Additional mitigation measures would be determined during the Application for Permit to Drill onsite process.
- Fuel or other chemicals would not be stored within 500 feet of Bitter Creek or other riparian areas and 100 feet from the edge of the inner gorge of intermittent or large ephemeral drainages. Exceptions would be considered on a case-by-case basis.
- Anadarko would coordinate and discuss with the BLM and WDEQ the baseline groundwater sampling required by the WOGCC and determine if any additional sampling is necessary prior to project development. Guidance would be provided by the *Regional Framework for Water Resources Monitoring Related to Energy Exploration and Development* (McMahon et al. 2007). Copies of the findings should be provided to all appropriate agencies, including BLM and DEQ.

- If previously undiscovered cultural resources are encountered during construction activities, work would be halted within 100 feet of the find, and the find would be reported to the BLM Authorized Officer. Treatment of any discovered cultural material would be conducted based on direction by the BLM.
- Anadarko Petroleum Corporation-appointed onsite supervisory personnel would be educated about the sensitive nature of cultural resources and the steps to be taken if buried cultural material would be encountered during construction. Workers would be informed that destruction, collection, or excavation of cultural resources from federal land is illegal.
- If human remains are discovered during construction activities, work would be immediately halted within 100 feet of the discovery, and the discovery would be reported to the BLM Authorized Officer. Treatment of any human remains would be conducted based on direction from the BLM.

This finding is based on my consideration of the Council on Environmental Quality's criteria for significance (40 CFR 1508.27), both with regard to the context and to the intensity of the impacts described in the EA or as articulated in the letters of comment.

Context

The Monell and Arch units are located approximately 31 miles east of Rock Springs in Sweetwater County, Wyoming and were developed in 1964 and 1959, respectively. Since that time the units have produced from three separate segments of the Almond formation from approximately 4,000 to 6,000 feet deep. All depths were unitized in 1964 (Monell Unit) and 1959 (Arch Unit), creating the Monell and Arch units, which is the project area under consideration. The area is intensively developed for oil and gas production. The project area consists of public, state, and private land, distributed in a checkerboard pattern.

Intensity

I have considered the potential intensity/severity of the impacts anticipated from the Monell and Arch Units Oil and Gas Development project. As a result, I have determined that a FONSI is consistent with regard to each of the ten factors. The basis of these conclusions is summarized briefly below:

1. Impacts that may be both beneficial and adverse.

The proposed project is consistent with the GRRMP and would provide the proponent access to develop federal mineral leases and would allow the lessee to develop existing leases subject to applicable federal and state laws and BLM policy.

As described in the EA, potential adverse impacts from the implementation of Alternative 2 (Proposed Action) include: disruption of soil horizons and vegetative communities, depletion of mineral resources, and reduction of available grazing units. Other resources may have minimal impacts associated with the proposal, but impacts would be offset by Applicant-committed Environmental Protection Measures and step down analysis and additional measures applied at the APD stage. However, none of these impacts would be significant at the local scale or cumulatively

because of the relative scale of the project, design features of the Proposed Action, and environmental protection measures.

Potential beneficial impacts from the implementation of Alternative 2 (Proposed Action) include socioeconomic improvements within Sweetwater County and other areas interacting with Sweetwater County.

2. *The degree to which the Proposed Action affects public health and safety.*

The proposed project is consistent with the GRRMP and would provide for public health and safety. Applicant-committed Environmental Protection Measures and adherence to applicable federal, state and local laws and policies would also provide for public health and safety.

3. *Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

Alternative 2 (Proposed Action) has no potential to affect unique characteristics such as historic or cultural resources or properties of concern to Native Americans. There are no wild and scenic rivers or ecologically critical areas present in the Project Area. Adherence to environmental protection measures and implementation of effective interim and final reclamation is expected to help maintain resource objectives for riparian, wetland, aquatic and terrestrial habitat.

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

The effects of the implementation of Alternative 2 (Proposed Action) are presented in the EA document. "Whether a proposed action is 'likely to be highly controversial' under 40 CFR 1508.27(b)(4) is not a question about the extent of public opposition, but, rather, about whether a substantial dispute exists as to its size, nature, or effect." *Missouri Coalition for the Environment*, 172 IBLA 226, 249 n.23 (2007). Comment letters on the EA provided no expert scientific evidence supporting claims that the project will have significant effects.

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

Possible effects on the human environment are not highly uncertain and do not involve unique or unknown risks. The analysis for Alternative 2 (Proposed Action) does not show that this action would involve any unique or unknown risks.

6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

The EA determined that Alternative 2 (Proposed Action) would result in no significant unmitigated effects. This conclusion is based on the specific facts of this project and does not set a precedent for, or automatically apply to, future oil and gas development projects that the BLM may be reviewing. Future actions would be subject to evaluation through the appropriate level of NEPA analysis.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

No project-specific or cumulative impacts associated with Alternative 2 (Proposed Action) have been identified that could not be avoided through the project's design or appropriate mitigation and avoidance measures. The impacts identified do not exceed the level of impacts outlined in the GRRMP.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.

Direct or indirect impacts to cultural and historic resources are not anticipated to occur from implementation of Alternative 2 (Proposed Action). Surface disturbing activities at proposed locations would be minimal and no historic properties would be adversely affected due to avoidance and identification of conflicts through site specific evaluation at the APD level. The RSFO archeologists would review all proposed surface disturbance activities to determine if a Class III cultural resources inventory was conducted, and/or if a new inventory is required. If cultural resources are encountered at proposed locations, those locations would not be utilized unless the proposal could be modified to avoid or mitigate adverse impacts to significant cultural resource sites.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Alternative 2 (Proposed Action) is not likely to adversely affect any listed species. Additionally, all proposed surface disturbing activities would be constructed and operated under the recommendations of a wildlife biologist to avoid adverse impacts to wildlife, including known sage-grouse leks, nesting and winter concentration areas, active raptor nests, White-tail Prairie Dog towns, Pygmy Rabbit habitat, Mountain Plover nesting habitat and big game crucial winter ranges and parturition areas.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Alternative 2 (Proposed Action) does not violate any known federal, state, local, or tribal law or requirement imposed for the protection of the environment. Additionally, the project is in compliance with the GRRMP.

Authorized Official:


Joanna Nara-Kloepper
Acting Field Manager
Rock Springs Field Office

12/19/2013
Date