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Department of Energy
Naval Petroleum Reserve/ Rocky Mountain Oil Filed Testing Center
907 N. Poplar Street, Suite 150
Casper WY 82601

October 1, 2008

DOE/EA 1583

FINDING OF NO SIGNIFICANT IMPACT for the ROCKY MOUNTAIN OILFIELD TESTING CENTER / NAVAL PETROLEUM RESERVE NO. 3 SITEWIDE ENVIRONMENTAL ASSESSMENT

AGENCY: Department of Energy, Naval Petroleum Reserve No. 3 / Rocky Mountain Oil Filed Testing Center

ACTION: Finding of No Significant Impact

SUMMARY: The U.S. Department of Energy (DOE) is proposing to continue oil and gas production at Naval Petroleum Reserve No. 3 (NPR-3) and to expand the operation of the Rocky Mountain Oil Filed Testing Center (RMOTC), located within NPR-3, as a Center of Excellence for testing and demonstrating new energy development techniques and technologies. The Proposed Action—continued operations of NPR-3 and expanded operations of RMOTC—represents a shift in DOE policy from the proposed facility shut-down and transfer assessed in the *1998 Sitewide Assessment for Preparation for Transfer of Ownership of Naval Petroleum Reserve No. 3*).

The proposed action to continue operations and expand the site's mission under RMOTC required that DOE evaluate these actions in compliance with the NEPA (42 U.S.C. 4321) and with DOE's NEPA implementing regulations (10 CFR section 1021.330) and procedures. In the Sitewide Environmental Assessment (SWEA), DOE evaluated three alternative operating futures for NPR-3 and RMOTC over the next 5 years: the Proposed Action, the No Action Alternative, and the Decommissioning and Divestiture (D&D) Alternative.

Under the Proposed Action, oil and gas extraction would continue at levels comparable to current operations, and in addition, RMOTC would expand its program of testing and evaluating technologies and equipment that would enhance oil and gas field operations and production. Under the No Action Alternative, NPR-3 operations would also continue at current levels, as would RMOTC's operations; however, the specific new projects proposed for the next 5 years under the Proposed Action that would expand RMOTC's research and testing mission would not occur. Under the D&D Alternative, DOE would close uneconomical wells, remove buildings and other facilities lacking value for future operations, and reduce its future liabilities at the site. Additionally, depending upon the success of these actions and the residual value of the field, DOE could choose to sell or transfer ownership of NPR-3 and RMOTC to another entity under the D&D Alternative.

All discussions and findings related to the Proposed Action, the No Action Alternatives, and the D&D alternative are presented in the attached Final Environmental Assessment and Appendices. The Final EA is hereby incorporated by reference.

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On the basis of the information and analyses presented in the final SWEA, DOE has determined that the proposed action and alternatives do not constitute a major Federal action significantly affecting the quality of the human environment, as defined by NEPA. Therefore, preparation of an environmental impact statement is not required for the ULP and DOE is issuing this Finding of No Significant Impact (FONSI). Based on this determination DOE will continue operations of NPR-3 and RMOTC will implement the specific actions assessed in the SWEA as funding permits.

SUPPLEMENTARY INFORMATION:

Background

DOE operates the Teapot Dome Oil Field, also known as the Naval Petroleum Reserve No. 3 (NPR-3), as the only operating oil field in the continental United States owned by the U.S. Government. This field is located in Natrona County, Wyoming, approximately 35 miles (56 kilometers) north of the City of Casper, and covers an area of 9,481 acres (3,837 hectares). Production at NPR-3 peaked in 1981; since then, production has declined until the oil field has become a mature stripper field with an average well yielding less than 2 barrels per day.

Production facilities include pumping units, treaters, and tanks for storing petroleum and produced water; low-temperature-separation gas plant; water and gas injection facilities; wastewater disposal system; wastewater treatment facility; and flow lines. In addition, there are numerous support facilities, including electric power distribution systems; cathodic protection systems; potable water and sewer systems; roads; bridges and fences; and buildings for maintenance, production support, administration, safety, security, and environmental purposes.

In 2008, an average of 58 contractor and DOE personnel were employed in the field, and an average of 40 were employed in the Casper office.

RMOTC was established in 1993 as an industry-driven endeavor to utilize NPR-3 resources and facilities to help strengthen the domestic energy industry by testing new petroleum and environmental technologies in operating oil and gas fields owned by the U.S. Government. RMOTC is working with the National Petroleum Technology Office, private companies, national laboratories, and universities to develop partnerships and combine resources for selected projects.

Commercial field testing at RMOTC began in 1995. The majority of the technology and processes field-tested at RMOTC have primary applications in drilling, oil production, enhanced recovery, alternative/renewable energy, and/or production cost reduction. Environmental testing and technology have been large growth areas and areas of increasing importance in both the domestic and worldwide industries.

Purpose and Need

DOE is mandated by Congress to produce oil and gas from NPR-3. As a part of this mission, DOE is committed to the utilization of NPR-3 to explore and develop new techniques and equipment that would enhance NPR-3 production and have applicability to the oil and gas industries. The proposed activities represent a substantial change to the scope and character of operations assessed in a 1998 Sitewide Assessment for Preparation for Transfer of Ownership of Naval Petroleum Reserve No. 3 (NPR-3) (DOE 1998). Consequently, new NEPA documentation was required.

Proposed Action

Under the Proposed Action, oil and gas resources would continue to be extracted from the NPR 3 reserves. Oil and gas extraction would involve the following principal activities:

- **Installing and Operating New Wells**: estimated at 6 to 10 wells per year with the needed support infrastructure of roads, power, and pipelines for produced water, oil, and gas from each well.

- **Plugging and Abandoning Wells** that are no longer economical to operate or useful for testing and demonstration purposes: estimated at 8 wells per year

Also under the Proposed Action, RMOTC's activities would focus on testing and evaluating energy-related technologies to extract oil and gas by methods that are more cost-efficient, safer, and less damaging to natural resources. These activities can be categorized as follows:

- **Oil and Gas Field Development Testing and Demonstration** would include conventional exploration methods, research and development (R&D) of new drilling methods, testing logging tools, and special test facilities to address problems associated with oil and gas extraction and transmission. Specific projects proposed for the next 5 years, which are evaluated in detail in this SWEA, include the Flow Assurance Loop Facility (FALF) and the Complex Well Technology Test Facility (CWTTF).

- **Enhanced Techniques for Oil Recovery** would evaluate techniques aimed at increasing the yields within existing oil and gas fields. One specific project, the Enhanced Oil Recovery (EOR) Technology Project, is currently proposed for the next 5 years and is evaluated in detail in this SWEA.

- **Application and Integration of Renewable Energy Sources** would demonstrate the feasibility of using renewable energy to extend the life of the field and increase the percentage of oil and gas extracted and to lower operating costs. Specific projects proposed for the next 5 years, which are evaluated in detail in this SWEA, include Geothermal Energy Enhancement Facilities and the Wind Turbine Pilot Project.

Environmental Impacts

For all alternatives assessed in the SWEA, impacts would be limited to varying acreages of surface and subsurface disturbance typical of oil field development that has been occurring at NPR-3 for many decades. Some of this disturbance would be offset by reclamation of old wells that would be plugged and abandoned. The principal environmental resources that would be affected by this disturbance would be biological and cultural. With the exception of an off-site pipeline that would bring carbon dioxide to NPR-3 for enhanced oil recovery (EOR) under the Proposed Action, all impacts would occur within the boundaries of NPR-3 for all alternatives.

Based on site surveys in areas that would be subject to disturbance under the alternatives assessed in this SWEA, there would be no disturbance of sensitive or protected plants or animals, nor would sensitive cultural, historical, or archaeological resources be disturbed. It is important to note that although there are known areas of sensitive biological and cultural resources on the NPR site, they would not be impacted by the proposed actions because: their locations are known by DOE and treated as confidential information to protect these resources; the resources exist outside the core areas of development which are generally centrally located within the NPR-3 site; all proposed actions would occur in this central core area; and DOE's site procedures restrict access to sensitive resource areas by site personnel and the public. Furthermore, because new cultural resources may be encountered even within the core development area during surface and subsurface disturbance activities, DOE has in place cultural resource protection procedures which assess each site prior to disturbance activities, and which will mitigate impacts to resources that might be encountered. Additionally, DOE has worked directly with interested Native American tribes who have determined that there are no traditional cultural properties at NPR-3.

Under the Proposed Action and the No Action Alternative, impacts would continue for the next 5 years assessed in the SWEA and beyond. Under the D&D Alternative, surface disturbance-related impacts would continue until the site was sufficiently reclaimed to allow closure and/or transfer. However, the cessation of oil and gas extraction under the D&D alternative would also eliminate the discharge of produced waters into site

drainages and the subsequent loss of miles of wetland habitat (both on-site and off-site) and a water source for wildlife, for which NPR-3 discharges are the principal supporter.

COPIES OF THE FINAL EA ARE AVAIALBLE FROM:

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DETERMINATION:

Based on the information presented in the Final SWEA (DOE/EA 1583), DOE determines that the proposed action and alternatives do not constitute a major Federal action significantly affecting the quality of the human environment, within the meaning of the National Environmental Policy Act. Therefore, the preparation of an Environmental Impact Statement is not required, and DOE is issuing this Finding of No Significant Impact. Based on this determination DOE will continue operations of NPR-3 and RMOTC will implement the specific actions assessed in the SWEA as funding permits.

Issued in Casper, Wyoming this 1ST day of Oct, 2008.

CLARKE D. TURNER
Director, NPR-3/RMOTC

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