

United States
Department of the Interior
Bureau of Land Management

Miles City Field Office

Nautilus Poplar, LLC

APDs

Determination of NEPA Adequacy
DOI-BLM-MT-C020-2013-0186-DNA

For Further Information Please Contact:

Bureau of Land Management
Miles City Field Office
111 Garryowen Road
Miles City, Montana 59301
406-233-2800

BLM



Worksheet
Documentation of NEPA Adequacy (DNA)
U.S. Department of the Interior
Bureau of Land Management (BLM)

BLM Office: Miles City

NEPA Number: DOI-BLM-MT-C020-2013-186-DNA

Case File/Project No:

Proposed Action Title/Type: The APDs for drilling one Tribal well and two Allotted wells for the exploration and testing for production of oil and the APD for drilling one Tribal well as an injection well for carbon dioxide and water. The project also includes the drilling of a fee well which is not approved by this office.

Location/Legal Description: NESW Section 32, T29N-R51E (EPU 200),
SWNE Section 32, T29N-R51E (EPU 201),
NWSE Section 32, T29N-R51E (EPU 202IW), and
NWSE Section 32, T29N-R51E (EPU 203).

A: Description of the Proposed Action: The proposed project includes 4 oil wells and 1 injection well. The injection well and 3 of the oil wells would be drilled into Indian leases and the fourth oil well would be drilled into a Fee lease. The wells would be configured in a five spot pattern with the injection well surrounded by the 4 oil wells. Carbon dioxide and water would be injected into the EPU 202IW (injection well) for the purpose of enhancing the recovery of oil from the Charles formation. The proposed project is located in the East Poplar Unit (EPU).

Applicant: Nautilus Poplar, LLC

County: Roosevelt

DNA Originator: Paul Helland

B. Land Use Plan (LUP) Conformance

LUP Name* NA** Date Approved

Other document** EA prepared for the BIA, Ft. Peck Agency Date Approved 7-12-2013

Other document** _____ Date Approved

**List applicable LUPs (for example, resource management plans; activity, project, management, or program plans; or applicable amendments thereto)*

***The BLM does not write surface NEPA documents for resources on Indian Reservations or development of Indian minerals off the reservation. That responsibility belongs to the Bureau of Indian Affairs. Therefore, there is not a BLM LUP for this proposed action. This DNA documents the BLM's review regarding the drilling operations and down hole portion of this action and is tiered to the NEPA document*

that was approved by the BIA-Ft. Peck Agency for the above wells.

N/A The proposed action is in conformance with the applicable LUPs because it is specifically provided for in the following LUP decisions:

N/A The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decisions (objectives, terms, and conditions)

C. Identify applicable National Environmental Policy Act (NEPA) document(s) and other related documents that cover the proposed action.

Environmental Assessment for the U.S. Department of the Interior, Bureau of Indian Affairs, Ft. Peck Agency, Poplar, MT.

D. NEPA Adequacy Criteria

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial? Down hole portions of this proposal including protection of surface and subsurface resources with regard to the drilling and casing programs are analyzed in the above mentioned environmental document.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, resource values? Yes, the range of alternatives considered in the EA (to allow the drilling of these proposed wells or not allow the drilling of these wells) is appropriate for this action.

3. Is the existing analysis valid in light of any new information or circumstances (such as rangeland health standard assessment, recent endangered species listings, updated lists of BLM-sensitive species)? Can you reasonably conclude that new information and new circumstance would not substantially change the analysis of the new proposed action? Yes, the EA was recently completed and is specific to this proposal. There are no known new circumstances or new information that would significantly change the analysis or conclusions.

4. Are the direct, indirect and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document? Yes. Compliance with the Drilling Plan(s) and Conditions of Approval will aid in mitigating the effects of this action as analyzed in the NEPA analysis.

Subsurface cumulative effects would be limited by isolating and protecting subsurface resources

using the proposed well bore construction methods. Subsurface cumulative effects would then be limited to the partial depletion of oil and/or natural gas in the target formation (the Charles formation).

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action? Yes, the BIA and BLM have both been involved in the review of this proposed action and coordinated with Tribal representatives.

E. Interdisciplinary Analysis: Identify those team members conducting or participating in the preparation of this worksheet.

<u>Name</u>	<u>Title</u>	<u>Resource Represented</u>	<u>Initials & Date</u>
Paul Helland	Petroleum Engineer	Minerals	PH 7/24/2013
David Breisch	Assistant Field Manager	Minerals	DJB 7/29/13
Rick Lang	NRS	Minerals	RCL 7/29/2013



Environmental Coordinator

8/1/2013

Date

F. Mitigation Measures: List any applicable mitigation measures that were identified, analyzed, and approved in relevant LUPs and existing NEPA document(s). List the specific mitigation measures or identify an attachment that includes those specific mitigation measures. Document that these applicable mitigation measures must be incorporated and implemented.

Please see attached COAs.

CONCLUSION

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of NEPA.

Note: If one or more of the criteria are not met, a conclusion of conformance and/or NEPA adequacy cannot be made and this box cannot be checked

Dan Benoit for
 Todd D. Yeager
 Field Manager
 Miles City Field Office

8/2/2013
 Date



United States Department of the Interior



In Reply To:
3160 (MTC022)
I-37-IND-12718
I-37-IND-12868
I-37-IND-13067

BUREAU OF LAND MANAGEMENT
Miles City Field Office
111 Garryowen Road
Miles City, Montana 59301-7000
<http://www.blm.gov/mt>

Nautilus Poplar LLC
Attn: Kimberly Rodell
700 East 9th Avenue Suite 200
Denver, CO 80203

Dear Ms. Rodell,

Your Applications for Permit to Drill (APDs) the EPU 200, 201, 202IW, and 203 wells in Section 32, T. 29 N., R. 51 E, in Roosevelt County, Montana, are approved subject to the provisions of the Applications for Permit to Drill, including the drilling and surface use programs submitted with your application, plus the following Conditions of Approval.

CONDITIONS OF APPROVAL

1. **Site Specific:**

As per the USFWS Standard Conditions and Recommendations, work would cease if whooping crane sightings occur within one mile of the proposed project area. In coordination of the Service, work may resume when the crane(s) have left the area.

The operator must comply with applicable State (Montana DEQ) and Federal (EPA) regulations to minimize impacts to air quality.

Install, wattles, or other sediment control along all toe slopes of the pad location.
Immediately establish vegetation growth after interim reclamation and topsoil placement.

A. Production Facilities:

1. If a tank battery is constructed on location, each tank setting, treater, and separator, must be surrounded on all sides by an impermeable dike of sufficient capacity to adequately contain 110% of the contents of the largest vessel within it, plus one (1) day's production.
2. Heater treater, incinerator and combustor exhaust stacks shall be fitted with an "exhaust cone" to prevent mortality to bats and nesting birds.

3. All above ground facilities shall be painted Covert Green 18-0617TPX within six months of well completion and maintained as such to comply with visual quality objectives.

B. Drilling Operations:

1. The pit shall be fenced on three sides during drilling operations and the fourth side after completion of drilling operations. The fence shall be constructed to the following requirements: posts to be no more than 16' apart; fence wire: four wires of at least 12.5 gauge, double strand twisted; two stays between posts; wire stretched taut between brace panels, wire spacing from the ground up: 14", 22", 30", 42" OR steel panels may be used to fence the pit. If steel panels are used, a steel post shall be placed every 4' to reinforce panels. Fence shall be maintained to prevent livestock and wildlife from entering the area until pit is reclaimed.
2. Storage tanks must be on the pad and surrounded with a dike and trench sloped to the cuttings pit.
3. If cuttings pit contains any fluids during active drilling, it shall be netted to prevent the entry of migratory birds and other wildlife.
4. If cuttings pit contains any fluids, a minimum of 2 feet of freeboard shall be maintained in the pit.
5. The pit shall be lined with a minimum 12 millimeter impermeable synthetic liner and permeability < 10⁻⁷ cm/sec; resistant to UV, weathering, chemicals, punctures, and tearing; and be placed on bedding material if bedrock is abrasive. The liner shall be installed in accordance with the manufactures requirements on material that will not tear or puncture the liner.
6. All pressure control equipment shall be in compliance with Onshore Order # 2 for a 2M system.
7. Surface casing shall have centralizers on the bottom three joints of the casing (a minimum of one centralizer per joint, starting with the shoe joint).

Notice

Receipt of this approval does not constitute Fort Peck Tribe approval for subsurface injection. Facility construction and injection cannot occur until approval has also been received from the Fort Peck Tribes Office of Environmental Protection pursuant to assumption of primacy for the UIC program effective November 26, 2008.

Stipulation

Any changes from this approved permit require re-submittal via new APD or Sundry Notice, as appropriate, and issuance of a new BLM approval prior to commencement of operations.

8. A cement bond log must be run from the deepest point possible in the production casing to the base of the surface casing.
9. If H₂S is encountered in excess of 100 ppm in the gas stream, the operator shall immediately ensure control of the well, suspend drilling ahead operations (unless detrimental to well control), and obtain materials and safety equipment to bring the operations into compliance with applicable provisions of Onshore Order No. 6. The operator shall notify the authorized officer of the event and the mitigating steps that have or are being taken as soon as possible, but no later than the next business day.
10. The operator is responsible for the suppression of any fires started as a result of operations. The contractor must have the necessary equipment, including fire extinguishers or water, to provide initial suppression of fire.

C. Pit reclamation:

1. If cuttings pit contains fluids and active drilling is not occurring, operator shall reclaim pit immediately upon cessation of drilling operations or shall net the entire pit to prevent the entry of migratory birds and other wildlife until the pit is reclaimed.
2. All pit(s) shall be emptied of all fluids within 90 days after completion of drilling operations.
3. The pit may not be cut or trenched.
4. The pit material shall be covered with a minimum of 3 feet of overburden. The pit shall be closed properly to assure protection of soil, water, and vegetation.

D. Waste Disposal:

1. Any materials classified as nonexempt hazardous wastes shall be disposed of in an EPA approved facility.
2. Burning of materials or oil is not allowed.

2. Verbal Notifications

The following notifications shall be made to the BLM, Miles City Field Office (MCFO) (406) 233-2800, or after business hours to the appropriate individual's home phone shown on the list attached.

- A. Notify this office verbally at least 48 hours prior to beginning construction.
- B. Notify this office verbally at least 12 hours prior to spudding the well (to be followed up in writing within 5 days).

- C. Notify this office verbally at least 12 hours prior to running any casing or conducting any BOP tests (to be followed up in writing within 5 days).
 - D. Notify this office verbally at least 6 hours prior to commencing any DST test.
 - E. Notify this office verbally at least 24 hours prior to plugging the well to receive verbal plugging orders.
3. A complete copy of the approved Application for Permit to Drill (APD), including conditions, stipulations, and the H2S contingency plan (if required) shall be available for reference at the well site during the drilling phases. **A copy of the approved Surface Use Plan of Operations and Conditions of Approval (COAs) shall be provided to the surface owner(s) prior to initiating construction.**
4. This drilling permit is valid for either two year from the approval date or until lease expiration, whichever occurs first.
5. If any cultural values (sites, artifacts, human remains, etc.) are observed during operation of this lease/permit/right-of-way, they are to be left intact and the BLM, Miles City Field Office and BIA notified. The authorized officer will conduct an evaluation of the cultural values to establish appropriate mitigation, salvage or treatment. The operator is responsible for informing all persons in the area who are associated with this project that they would be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is immediately to stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days, the AO would inform the operator as to:
- A. whether the materials appear eligible for the National Register of Historic Places;
 - B. the mitigation measures the operator would likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
 - C. a timeframe for the AO to complete an expedited review under 35 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

6. The Operator shall be responsible for control of noxious weeds occurring as a result of lease operations. The surface owner shall be responsible for approval of the weed control program.

7. The abandonment marker shall exhibit the same information required for the well sign. The abandonment marker (steel plate welded to surface casing 4' below ground level) shall be installed when the well is plugged.
8. Additional requirements may be imposed if changes in operational and/or environmental conditions dictate.

You have the right to request a State Director Review of this decision and these Conditions of Approval pursuant to 43 CFR 3165.3(b). An SDR request, including all supporting documentation must be filed with the Montana State Office, State Director (MT-920) at 5001 Southgate Drive, Billings, Montana 59101-4669 within 20 business days of your receipt of this decision. If adversely affected by the State Director's decision, it can be further appealed to the Interior Board of Land Appeals (IBLA) pursuant to 43 CFR 3165.4, 43 CFR 4.411, and 43 CFR 4.413. Should you fail to timely request an SDR, or after receiving the State Director's decision, fail to timely file an appeal with IBLA, no further administrative review of this decision will be possible.

INFORMATIONAL NOTICE

This is not a complete list of requirements, but is an abstract of some major requirements.

1. General Requirements

- a. The lessee or designated operator shall comply with applicable laws and regulations; with the lease terms, Onshore Oil and Gas Orders; NTL's; and with other orders and instructions of the authorized officer. Any deviation from the terms of the approved APD require prior approval from BLM (43 CFR 3162.1(a)).
- b. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease due to a lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligation determined by the authorized officer.

2. Drilling Operations (Onshore Order No. 2)

- a. If DST's are run, all applicable safety precautions outlined in Onshore Order No. 2 shall be observed.
- b. All indications of usable water (10,000 ppm or less TDS) shall be reported to the Miles City Field Office prior to running the next string of casing or before plugging orders are requested, whichever occurs first.

3. Well Abandonment (43 CFR 3162.3-4, Onshore Order No. 1 - Sec. V)

Approval for abandonment shall be obtained prior to beginning plugging operations. Initial approval for plugging operations may be verbal, but shall be followed-up in writing within 30 days. Subsequent and final abandonment notifications are required and shall be submitted on Sundry Notice (Form 3160-5), in triplicate.

4. Reports and Notifications (43 CFR 3162.4-1, 3162.4-3)

- a. Within 30 days of completion of the well as a dry hole or producer, a copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions or data obtained and compiled during the drilling, workover, and/or completion operations shall be filed with a Completion Report (Form 3160-4), in duplicate.
- b. In accordance with 43 CFR 3162.4-3, this well shall be reported on the Oil and Gas Operations Report (OGOR, MMS-4054), starting with the month in which drilling operations commence, and continuing each month until the well is physically plugged and abandoned.
- c. Notify this office within 5 business days of production start-up if either of the following two conditions occur:
 - (1) The well is placed on production.
 - (2) The well resumes production after being off of production for more than 90 days.

"Placed on production" means shipment or sales of hydrocarbons from temporary tanks, production into permanent facilities or measurement through permanent facilities.

Notification may be written or verbal with written follow-up within 15 days, and must include the following information:

1. Operator name, address, and telephone number.
 2. Well name and number, county and state.
 3. Well location, "1/4/4", Section, Township, Range, P.M."
 4. Date well begins or resumes production.
 5. The nature of the well's production; that is crude oil, or crude oil casing gas, or natural gas and entrained liquid hydrocarbons.
 6. The Federal or Indian lease number.
 7. As appropriate, the Unit Agreement name, number and Participating Area name.
 8. As appropriate, the Communitization Agreement number.
- d. As per Onshore Order No. 6, A.2.b., the "operator shall initially test the H₂S concentration of the gas stream for each well or production facility..." Submit the results of this test within 30 days of filing Form 3160-4, "Well Completion or Recompletion Report and Log".
5. Environmental Obligations and Disposition of Production (43 CFR 3162.5-1, 3162.7-1 and 40 CFR 302-4)
- a. With BLM approval, water produced from newly completed wells may be temporarily stored in reserve pits up to 90 days. During this initial period, application for the permanent disposal method shall be made to this office in accordance with Onshore Order No. 7. If underground injection is proposed, an EPA or State permit shall also be obtained. If surface discharge of produced water is proposed, an MPDES permit shall also be required.
 - b. Spills, accidents, fires, injuries, blowout and other undesirable events shall be reported to this office within the timeframes in NTL-3A.
 - c. You are required to take all necessary steps to prevent any death of a migratory bird in pits or open vessels associated with the drilling, testing, completion, or production of this well. The death of any migratory bird found in such a pit or open vessel is a violation of the Migratory Bird Treaty Act and is considered a criminal act. Any deaths of migratory birds attributable to pits or open vessels associated with drilling, testing, completing or production operations must be reported to this office and the United States Fish and Wildlife Service within 24 hours.

We may require that the pit be designed or the open vessel be covered to deter the entry of birds in any facility associated with drilling, testing, completion or production of this well. Fencing, screening and netting of pits may be required as a means to deter bird entry.

These conditions would most likely be imposed to prevent the entry of migratory birds if oil is left in pits or open vessels after the cessation of drilling or completion of operations, if water disposal pits consistently receive oil, or if pits or open vessels are used repeatedly for emergency situations which result in the accumulation of oil.

Voluntary pit fencing, screening and netting, or sealing vessels, is encouraged to avoid potential instances that may result in the death of a migratory bird.

- d. Gas produced from this well may not be vented or flared beyond an initial, authorized test period of 30 days or 50 MMCF following its completion, whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue the venting or flaring as uneconomic is granted, and you shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

6. Well Identification (43 CFR 3162.6)

Each drilling, producing or abandoned well shall be identified with the operator's name, the lease serial number, the well number, and the surveyed description of the well (either footages or the quarter-quarter section, the section, township and range). The Indian lessor's name may also be required. All markings shall be legible, and in a conspicuous place.

7. Site Security (43 CFR 3162.7.5)

- a. Oil storage facilities shall be clearly identified with a sign, and tanks must be individually identified (43 CFR 3162.6(c)).
- b. Site security plans shall be completed within 60 days of production startup (43 CFR 3162.7-5(c)).
- c. Site facility diagrams shall be filed in this office within 60 days after facilities are installed or modified (43 CFR 3162.7-5(d)(1)).

8. Public Availability of Information (43 CFR 3100.4)

All submitted information not marked "CONFIDENTIAL INFORMATION" will be available for public inspection upon request.

Thank you for your cooperation. If you have any questions, please contact a member of our staff at 406-233-2800, or at home, after business hours as shown on the attached list.

Sincerely,

Dan Benoit for

Todd D. Yeager
Field Manager
Miles City Field Office

**UNITED STATE DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MILES CITY FIELD OFFICE
111 GARRYOWEN ROAD
MILES CITY, MONTANA 59301-7000**

**Finding of No Significant Impact
Environmental Assessment
Nautilus Poplar LLC
EPU 200, EPU 201, EPU 202IW, EPU 203 Wells**

INTRODUCTION:

The Bureau of Indian Affairs (BIA) completed an Environmental Assessment (EA) for the Applications for Permit to Drill (APD) for the Nautilus Poplar LLC wells numbered EPU 200, 201, 202IW, and 203. The APDs include the drilling, completing, and producing of 3 vertical oil wells and 1 injection well, along with the construction of access roads and installation of the associated infrastructure, and reclamation of disturbed areas. The proposed wells are located in Roosevelt County, Montana, approximately 10 miles north of Poplar, Montana.

The EA analyzed the No Action Alternative and the Proposed Action with mitigation measures. The EA is hereby adopted by BLM, attached to and incorporated by reference into this Finding of No Significant Impact (FONSI) determination.

Plan Conformance: The BLM does not have land use management authority for Indian lands. Therefore there are no BLM land use management plans or decisions which apply to the lands on which the 4 wells would be located. Additionally, BLM does not write surface NEPA documents for resources on Indian lands in accordance with the terms of a Memorandum of Understanding between BLM and the BIA (BLM-MOU-MT920-0121); that responsibility belongs to the BIA as the surface management agency for the affected tribal and allotted lands.

The proposed action has been reviewed and approval recommended by the Superintendent of the Ft. Peck Agency, of the BIA.

Finding of No Significant Impact Determination: Based upon a review of the EA and the supporting documents, I have determined that the project is not a major federal action, significantly affecting the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity, as defined in 40 CFR 1508.27. Therefore, an environmental impact statement is not needed. This finding is based on the context and intensity of the project as described below.

Context: The project is a site-specific action directly involving a total of approximately 15 acres of new disturbance in Roosevelt County, MT. The project area includes 8 abandoned wells, 7 producing oil wells, and 3 injection wells (an area determined within a radius of 1 mile from the

proposed well locations that amounts to about 2,009.6 acres). The proposed action would be to construct four level well pads, associated access roads and installation of infrastructure.

Intensity: The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27.

1. Impacts may be both beneficial and adverse.

The proposed action would impact resources as described in the EA. Mitigation measures to minimize or eliminate adverse impacts were identified in the analysis and will be included as Conditions of Approval with the approved permits. Beneficial impacts from the proposed project could occur, such as the potential to bring additional oil and gas into the market place and increase revenues to Tribal, federal, state and local governments. The proposal will obtain scientific data of the local geology which will increase the knowledge base of the subsurface mineral resources.

2. The degree to which the selected alternative will affect public health or safety.

The selected alternative minimizes adverse impacts to public health and safety by project design and additional mitigation measures.

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

The proposed well sites, pipeline routes, and access roads have been inventoried for cultural resources by ACR Consultants Inc. The BIA determined that cultural and historic resources would not be adversely affected. There are no effects on park lands, prime farm lands, wetlands, wild and scenic rivers, or ecologically critical areas.

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

The environmental analysis did not show any highly controversial effects to the quality of the human environment.

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

The project is not unique or unusual because BLM and the State of Montana have approved similar actions in the same geographic area. The environmental effects to the human environment are analyzed in the environmental assessment. There are no known predicted effects on the human environment that are considered to be highly uncertain or involve 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 actions considered in the proposed action were considered by the BIA and BLM within the context of past, present, and reasonably foreseeable future actions. The action would not

establish a precedent, since the project area is already within an area explored for oil gas resources.

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

The environmental assessment evaluated the possible actions in context of past, present and reasonably foreseeable actions. The analysis did not disclose any significant cumulative impacts. A disclosure of the effects of the project is contained in the environmental assessment.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or other 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 historical resources.

The project will not affect districts, sites, highways, structures, or other objects listed on or eligible for listing in the National Register of Historic Places, nor will it cause loss or destruction of significant scientific, cultural, or historical resources.

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.

According to the environmental analysis, no threatened, endangered or other special status species are known to inhabit the subject area. The project is in compliance with the Endangered Species Act of 1973.

10. Whether the action threatens a violation of a Federal, State, Local, or Tribal law, regulation or policy imposed for the protection of the environment, where non-Federal requirements are consistent with Federal requirements.

The project does not violate any known Federal, State, Local or Tribal law or requirement imposed for the protection of the environment. The project is consistent with applicable regulations found in 25 CFR and 43 CFR.

Approved By: Dan Benoit for _____

 8/2/2013

Todd D. Yeager
Field Manager
Miles City Field Office

Date

Decision Record
Environmental Assessment
Nautilus Poplar LLC
EPU 200, EPU 201, EPU 202IW, EPU 203 Wells

DECISION:

Based upon the analysis of potential environmental impacts and mitigation measures described in the Environmental Assessment (EA) prepared by the BIA, it is my decision to select the Proposed Action Alternative, including the mitigation measures, from the EA and approve the Applications for Permit to Drill (APDs) for the wells EPU 200, EPU 201, EPU 202IW and EPU 203 as modified by the attached conditions of approval.

ALTERNATIVES

In addition to the selected alternative, the EA considered the "No Action" alternative, which would carry out no management activities at this time.

RATIONALE FOR SELECTION

The Bureau of Land Management (BLM) has trust responsibilities for Indian tribal and allotted oil and gas leases and Indian Mineral Development Trust mineral agreements (IMDA). The BLM coordinates with the Bureau of Indian Affairs (BIA) to insure the approval process of energy production and help protect sensitive resources within BIA and tribal jurisdiction.

The purpose of the action is to allow Nautilus Poplar LLC to drill and produce the EPU 200, EPU 201, and EPU 203 and to inject water and carbon dioxide in EPU 202IW well to test the recovery of oil by the injection of water and carbon dioxide. If the project is successful, the enhanced recovery of oil by the injection of water and carbon dioxide would provide for the continued orderly, efficient and environmentally responsible development of the Allotted Indian Leases. This would be consistent with 43 CFR Part 3160, Onshore Oil and Gas Order Number 1, and the Memorandum of Understanding between the BLM and the BIA, (BLM-MOU-MT920-0121 (MOU)).

The BLM does not have land use management authority for Indian lands. Therefore there are no BLM land use management plans or decisions which apply to those lands. Additionally, BLM does not write surface NEPA documents for resources on Indian lands in accordance with the terms of the MOU; that responsibility belongs to the BIA.

Oil and gas lands owned by Native Americans or Tribes are evaluated by the Tribes and BIA with subsequent leases issued by the BIA. The proposed action has been reviewed by the BIA.

Compliance and Monitoring: Bureau of Land Management and Bureau of Indian Affairs will conduct compliance and monitoring inspections during the different phases of operations.

Inspections will be conducted to determine whether or not operations are being conducted in compliance with the approved permit. Monitoring inspections will be conducted to determine the effectiveness of mitigation measures, results of reclamation work, and impacts to other resources. Based upon the results of inspections, BLM and BIA could impose requirements to modify operations to minimize or eliminate adverse impacts to other resources.

Terms / Conditions / Stipulations: The following mitigation measures were analyzed in the EA and are included as Conditions of Approval with each approved APD.

Approved By: Dan Benoit for
Todd D. Yeager
Field Manager
Miles City Field Office

8/2/2013
Date



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Miles City Field Office
111 Garryowen Road
Miles City, Montana 59301-7000
<http://www.blm.gov/mt>

In Reply To:
3160 (MTC022)
I-37-IND 12718
I-37-IND-12868
I-37-IND-13067

Nautilus Poplar LLC
Attn: Kimberly Rodell
700 East 9th Avenue Suite 200
Denver, CO 80203

Dear Ms. Rodell,

Your Applications for Permit to Drill (APDs) the EPU 200, 201, 202IW, and 203 wells in Section 32, T. 29 N., R. 51 E, in Roosevelt County, Montana, are approved subject to the provisions of the Applications for Permit to Drill, including the drilling and surface use programs submitted with your application, plus the following Conditions of Approval.

CONDITIONS OF APPROVAL

4. Site Specific:

As per the USFWS Standard Conditions and Recommendations, work would cease if whooping crane sightings occur within one mile of the proposed project area. In coordination of the Service, work may resume when the crane(s) have left the area.

The operator must comply with applicable State (Montana DEQ) and Federal (EPA) regulations to minimize impacts to air quality.

Install, wattles, or other sediment control along all toe slopes of the pad location.
Immediately establish vegetation growth after interim reclamation and topsoil placement.

D. Production Facilities:

1. If a tank battery is constructed on location, each tank setting, treater, and separator, must be surrounded on all sides by an impermeable dike of sufficient capacity to adequately contain 110% of the contents of the largest vessel within it, plus one (1) day's production.

5. Heater treater, incinerator and combustor exhaust stacks shall be fitted with an “exhaust cone” to prevent mortality to bats and nesting birds.
6. All above ground facilities shall be painted Covert Green 18-0617TPX within six months of well completion and maintained as such to comply with visual quality objectives.

E. Drilling Operations:

11. The pit shall be fenced on three sides during drilling operations and the fourth side after completion of drilling operations. The fence shall be constructed to the following requirements: posts to be no more than 16’ apart; fence wire: four wires of at least 12.5 gauge, double strand twisted; two stays between posts; wire stretched taut between brace panels, wire spacing from the ground up: 14”, 22”, 30”, 42” OR steel panels may be used to fence the pit. If steel panels are used, a steel post shall be placed every 4’ to reinforce panels. Fence shall be maintained to prevent livestock and wildlife from entering the area until pit is reclaimed.
12. Storage tanks must be on the pad and surrounded with a dike and trench sloped to the cuttings pit.
13. If cuttings pit contains any fluids during active drilling, it shall be netted to prevent the entry of migratory birds and other wildlife.
14. If cuttings pit contains any fluids, a minimum of 2 feet of freeboard shall be maintained in the pit.
15. The pit shall be lined with a minimum 12 millimeter impermeable synthetic liner and permeability < 10⁻⁷ cm/sec; resistant to UV, weathering, chemicals, punctures, and tearing; and be placed on bedding material if bedrock is abrasive. The liner shall be installed in accordance with the manufactures requirements on material that will not tear or puncture the liner.
16. All pressure control equipment shall be in compliance with Onshore Order # 2 for a 2M system.
17. Surface casing shall have centralizers on the bottom three joints of the casing (a minimum of one centralizer per joint, starting with the shoe joint).

Notice

Receipt of this approval does not constitute Fort Peck Tribe approval for subsurface injection. Facility construction and injection cannot occur until approval has also been received from the Fort Peck Tribes Office of Environmental Protection pursuant to assumption of primacy for the UIC program effective November 26, 2008.

Stipulation

Any changes from this approved permit require re-submittal via new APD or

Sundry Notice, as appropriate, and issuance of a new BLM approval prior to commencement of operations.

18. A cement bond log must be run from the deepest point possible in the production casing to the base of the surface casing.
19. If H₂S is encountered in excess of 100 ppm in the gas stream, the operator shall immediately ensure control of the well, suspend drilling ahead operations (unless detrimental to well control), and obtain materials and safety equipment to bring the operations into compliance with applicable provisions of Onshore Order No. 6. The operator shall notify the authorized officer of the event and the mitigating steps that have or are being taken as soon as possible, but no later than the next business day.
20. The operator is responsible for the suppression of any fires started as a result of operations. The contractor must have the necessary equipment, including fire extinguishers or water, to provide initial suppression of fire.

F. Pit reclamation:

5. If cuttings pit contains fluids and active drilling is not occurring, operator shall reclaim pit immediately upon cessation of drilling operations or shall net the entire pit to prevent the entry of migratory birds and other wildlife until the pit is reclaimed.
6. All pit(s) shall be emptied of all fluids within 90 days after completion of drilling operations.
7. The pit may not be cut or trenched.
8. The pit material shall be covered with a minimum of 3 feet of overburden. The pit shall be closed properly to assure protection of soil, water, and vegetation.

D. Waste Disposal:

1. Any materials classified as nonexempt hazardous wastes shall be disposed of in an EPA approved facility.
2. Burning of materials or oil is not allowed.

3. Verbal Notifications

The following notifications shall be made to the BLM, Miles City Field Office (MCFO) (406) 233-2800, or after business hours to the appropriate individual's home phone shown on the list attached.

- F. Notify this office verbally at least 48 hours prior to beginning construction.

- G. Notify this office verbally at least 12 hours prior to spudding the well (to be followed up in writing within 5 days).
 - H. Notify this office verbally at least 12 hours prior to running any casing or conducting any BOP tests (to be followed up in writing within 5 days).
 - I. Notify this office verbally at least 6 hours prior to commencing any DST test.
 - J. Notify this office verbally at least 24 hours prior to plugging the well to receive verbal plugging orders.
5. A complete copy of the approved Application for Permit to Drill (APD), including conditions, stipulations, and the H2S contingency plan (if required) shall be available for reference at the well site during the drilling phases. **A copy of the approved Surface Use Plan of Operations and Conditions of Approval (COAs) shall be provided to the surface owner(s) prior to initiating construction.**
6. This drilling permit is valid for either two year from the approval date or until lease expiration, whichever occurs first.
5. If any cultural values (sites, artifacts, human remains, etc.) are observed during operation of this lease/permit/right-of-way, they are to be left intact and the BLM, Miles City Field Office and BIA notified. The authorized officer will conduct an evaluation of the cultural values to establish appropriate mitigation, salvage or treatment. The operator is responsible for informing all persons in the area who are associated with this project that they would be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is immediately to stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days, the AO would inform the operator as to:
- D. whether the materials appear eligible for the National Register of Historic Places;
 - E. the mitigation measures the operator would likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
 - F. a timeframe for the AO to complete an expedited review under 35 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

6. The Operator shall be responsible for control of noxious weeds occurring as a result of lease operations. The surface owner shall be responsible for approval of the weed control program.
7. The abandonment marker shall exhibit the same information required for the well sign. The abandonment marker (steel plate welded to surface casing 4' below ground level) shall be installed when the well is plugged.
8. Additional requirements may be imposed if changes in operational and/or environmental conditions dictate.

You have the right to request a State Director Review of this decision and these Conditions of Approval pursuant to 43 CFR 3165.3(b). An SDR request, including all supporting documentation must be filed with the Montana State Office, State Director (MT-920) at 5001 Southgate Drive, Billings, Montana 59101-4669 within 20 business days of your receipt of this decision. If adversely affected by the State Director's decision, it can be further appealed to the Interior Board of Land Appeals (IBLA) pursuant to 43 CFR 3165.4, 43 CFR 4.411, and 43 CFR 4.413. Should you fail to timely request an SDR, or after receiving the State Director's decision, fail to timely file an appeal with IBLA, no further administrative review of this decision will be possible.

INFORMATIONAL NOTICE

This is not a complete list of requirements, but is an abstract of some major requirements.

1. General Requirements

- a. The lessee or designated operator shall comply with applicable laws and regulations; with the lease terms, Onshore Oil and Gas Orders; NTL's; and with other orders and instructions of the authorized officer. Any deviation from the terms of the approved APD require prior approval from BLM (43 CFR 3162.1(a)).
- b. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease due to a lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligation determined by the authorized officer.

2. Drilling Operations (Onshore Order No. 2)

- a. If DST's are run, all applicable safety precautions outlined in Onshore Order No. 2 shall be observed.
- b. All indications of usable water (10,000 ppm or less TDS) shall be reported to the Miles City Field Office prior to running the next string of casing or before plugging orders are requested, whichever occurs first.

3. Well Abandonment (43 CFR 3162.3-4, Onshore Order No. 1 - Sec. V)

Approval for abandonment shall be obtained prior to beginning plugging operations. Initial approval for plugging operations may be verbal, but shall be followed-up in writing within 30 days. Subsequent and final abandonment notifications are required and shall be submitted on Sundry Notice (Form 3160-5), in triplicate.

4. Reports and Notifications (43 CFR 3162.4-1, 3162.4-3)

- a. Within 30 days of completion of the well as a dry hole or producer, a copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions or data obtained and compiled during the drilling, workover, and/or completion operations shall be filed with a Completion Report (Form 3160-4), in duplicate.
- b. In accordance with 43 CFR 3162.4-3, this well shall be reported on the Oil and Gas Operations Report (OGOR, MMS-4054), starting with the month in which drilling operations commence, and continuing each month until the well is physically plugged and abandoned.
- c. Notify this office within 5 business days of production start-up if either of the following two conditions occur:
 - (1) The well is placed on production.
 - (2) The well resumes production after being off of production for more than 90 days.

"Placed on production" means shipment or sales of hydrocarbons from temporary tanks, production into permanent facilities or measurement through permanent facilities.

Notification may be written or verbal with written follow-up within 15 days, and must include the following information:

1. Operator name, address, and telephone number.
 2. Well name and number, county and state.
 3. Well location, "¼¼", Section, Township, Range, P.M."
 4. Date well begins or resumes production.
 5. The nature of the well's production; that is crude oil, or crude oil casing gas, or natural gas and entrained liquid hydrocarbons.
 6. The Federal or Indian lease number.
 7. As appropriate, the Unit Agreement name, number and Participating Area name.
 8. As appropriate, the Communitization Agreement number.
- d. As per Onshore Order No. 6, A.2.b., the "operator shall initially test the H₂S concentration of the gas stream for each well or production facility..." Submit the results of this test within 30 days of filing Form 3160-4, "Well Completion or Recompletion Report and Log".
5. Environmental Obligations and Disposition of Production (43 CFR 3162.5-1, 3162.7-1 and 40 CFR 302-4)
- a. With BLM approval, water produced from newly completed wells may be temporarily stored in reserve pits up to 90 days. During this initial period, application for the permanent disposal method shall be made to this office in accordance with Onshore Order No. 7. If underground injection is proposed, an EPA or State permit shall also be obtained. If surface discharge of produced water is proposed, an MPDES permit shall also be required.
 - b. Spills, accidents, fires, injuries, blowout and other undesirable events shall be reported to this office within the timeframes in NTL-3A.
 - c. You are required to take all necessary steps to prevent any death of a migratory bird in pits or open vessels associated with the drilling, testing, completion, or production of this well. The death of any migratory bird found in such a pit or open vessel is a violation of the Migratory Bird Treaty Act and is considered a criminal act. Any deaths of migratory birds attributable to pits or open vessels associated with drilling, testing, completing or production operations must be reported to this office and the United States Fish and Wildlife Service within 24 hours.

We may require that the pit be designed or the open vessel be covered to deter the entry of birds in any facility associated with drilling, testing, completion or production of this well. Fencing, screening and netting of pits may be required as a means to deter bird entry.

These conditions would most likely be imposed to prevent the entry of migratory birds if oil is left in pits or open vessels after the cessation of drilling or completion of operations, if water disposal pits consistently receive oil, or if pits or open vessels are used repeatedly for emergency situations which result in the accumulation of oil.

Voluntary pit fencing, screening and netting, or sealing vessels, is encouraged to avoid potential instances that may result in the death of a migratory bird.

- d. Gas produced from this well may not be vented or flared beyond an initial, authorized test period of 30 days or 50 MMCF following its completion, whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue the venting or flaring as uneconomic is granted, and you shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

6. Well Identification (43 CFR 3162.6)

Each drilling, producing or abandoned well shall be identified with the operator's name, the lease serial number, the well number, and the surveyed description of the well (either footages or the quarter-quarter section, the section, township and range). The Indian lessor's name may also be required. All markings shall be legible, and in a conspicuous place.

7. Site Security (43 CFR 3162.7.5)

- a. Oil storage facilities shall be clearly identified with a sign, and tanks must be individually identified (43 CFR 3162.6(c)).
- b. Site security plans shall be completed within 60 days of production startup (43 CFR 3162.7-5(c)).
- c. Site facility diagrams shall be filed in this office within 60 days after facilities are installed or modified (43 CFR 3162.7-5(d)(1)).

8. Public Availability of Information (43 CFR 3100.4)

All submitted information not marked "CONFIDENTIAL INFORMATION" will be available for public inspection upon request.

Thank you for your cooperation. If you have any questions, please contact a member of our staff at 406-233-2800, or at home, after business hours as shown on the attached list.

Sincerely,

Dan Benoit for

Todd D. Yeager
Field Manager
Miles City Field Office