



# United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
Great Plains Regional Office  
115 Fourth Avenue S.E., Suite 400  
Aberdeen, South Dakota 57401



IN REPLY REFER TO:  
DESCRM  
MC-208

DEC 21 2011

## MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: Regional Director, Great Plains Region

SUBJECT: Environmental Assessment Addendum and Finding of No Significant Impact

In compliance with the regulations of the National Environmental Policy Act (NEPA) of 1969, as amended, an Addendum has been completed and a Finding of No Significant Impact (FONSI) has been issued. The addendum authorizes land use for installation of gathering pipelines connecting the Paul Peter Coffee #35H wells to the existing Arrow-Phase 2 Southeast Pipeline System on the Fort Berthold Indian Reservation.

All the necessary requirements of the National Environmental Policy Act have been completed. Attached for your files is a copy of the EA Addendum, FONSI and Notice of Availability. The Council on Environmental Quality (CEQ) regulations require that there be a public notice of availability of the FONSI (40 C.F.R. Part 1506.6(b)). Please post the attached notice of availability at the Agency and Tribal buildings for 30 days.

If you have any questions, please call Marilyn Bercier, Regional Environmental Scientist, Division of Environment, Safety and Cultural Resources Management, at (605) 226-7656.

Attachment

cc: Tex Hall, Chairman, Three Affiliated Tribes (with attachment)  
Elgin Crows Breast, Tribal Historic Preservation Officer (with attachment)  
Derek Enderud, BLM, Bureau of Land Management (with attachment)  
Damien Reinhart, SWCA (with attachment)  
Jonathon Shelman, Corps of Engineers  
Jeff Hunt, Fort Berthold Agency

**Finding of No Significant Impact**  
**Dakota-3 E&P**

**Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-  
Phase 2 Southeast Pipeline System**

**Fort Berthold Indian Reservation**  
**Dunn County, North Dakota**

The U.S. Bureau of Indian Affairs (BIA) has received a proposed addendum to authorize land use for the installation of gathering pipelines connecting the Paul Peter Coffee #35H Wells to the existing Arrow-Phase 2 Southeast Pipeline System on the Fort Berthold Indian Reservation in Dunn County, North Dakota. Associated federal actions by BIA include determinations of effect regarding cultural resources, approvals of leases, rights-of-way and easements, and a positive recommendation to the Bureau of Land Management regarding the Applications for Permit to Drill.

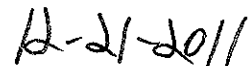
The potential of the proposed actions to impact the human environment is analyzed in the attached Environmental Assessment (EA), as required by the National Environmental Policy Act. Based on the recently completed EA, I have determined that the proposed projects will not significantly affect the quality of the human environment. No Environmental Impact Statement is required for any portion of the proposed activities.

This determination is based on the following factors:

1. Agency and public involvement was solicited and environmental issues related to the proposal were identified.
2. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, public safety, water resources, and cultural resources. The remaining potential for impacts was disclosed for both the proposed action and the No Action alternative.
3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species. This guidance includes the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.) (NEPA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", and the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA).
4. The proposed actions are designed to avoid adverse effects to historic, archaeological, cultural and traditional properties, sites and practices. Compliance with the procedures of the National Historic Preservation Act is complete.
5. Environmental justice was fully considered.
6. Cumulative effects to the environment are either mitigated or minimal.
7. No regulatory requirements have been waived or require compensatory mitigation measures.
8. The proposed projects will improve the socio-economic condition of the affected Indian community.



Regional Director



Date

**ENVIRONMENTAL ASSESSMENT  
Addendum**

**United States Bureau of Indian Affairs**

**Great Plains Regional Office  
Aberdeen, South Dakota**



**Dakota-3 E&P Company, LLC**

**Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing  
Arrow-Phase 2 Southeast Pipeline System**

**Fort Berthold Indian Reservation**

**December 2011**

For information contact:  
Bureau of Indian Affairs, Great Plains Regional Office  
Division of Environment, Safety and Cultural Resources Management  
115 4th Avenue SE, Aberdeen, South Dakota 57401  
(605) 226-7656

*Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-  
Phase 2 Southeast Pipeline System  
(December 2011)*

---

**TABLE OF CONTENTS**

	<u>Page</u>
1. Purpose and Need for the Proposed Action .....	1
2. Authorities .....	1
3. Legal Land Description for Proposed Action .....	1
4. Scope of Work for Proposed Action.....	1
5. Materials Information and Corrosion Rates.....	2
6. Spill Response Plan .....	2
7. Pipeline Marking Procedures.....	3
8. Quality Control/Quality Assurance Measures .....	3
9. Valve Locations .....	3
10. Reclamation.....	3
11. Resource Surveys .....	4
12. Potential Effects to Cultural and Natural Resources.....	5
13. Applicable National Environmental Policy Act (NEPA) Document(s).....	5
14. NEPA Adequacy Criteria.....	6

**LIST OF FIGURES**

<u>Figure</u>	<u>Page</u>
1. Paul Peter Coffee #35H well pad and proposed gathering pipeline location .....	7

**LIST OF APPENDICES**

Appendix

- A. Pipeline Layout Plats for the Proposed Paul Peter Coffee #35H Gathering Pipelines

*Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase  
2 Southeast Pipeline System  
(December 2011)*

## **1. Purpose and Need for the Proposed Action**

The purpose of the proposed action is to authorize the land use by Dakota-3 E&P Company, LLC (Dakota-3) for the construction and installation of three pipelines including one oil pipeline, one gas pipeline, and one produced water pipeline. As proposed, the pipeline system (pipelines) would transport oil, gas, and produced water from the Paul Peter Coffee #35H wells to markets and approved disposal sites. A buried electrical line may be installed in the future within the approved right-of-way (ROW).

Developments have been proposed on land held in trust by the United States in Dunn County, North Dakota (ND). The Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected tribal lands and individual allotments. The economic development of available resources and associated BIA actions are consistent with BIA's general mission. Leasing and development of mineral resources offers economic benefits to the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nations and to individual tribal members.

## **2. Authorities**

Oil and gas exploration and development activities are conducted under authority of the Indian Mineral Leasing Act of 1938 (25 United States Code [USC] 396a, et seq.), the Indian Mineral Development Act of 1982 (25 USC 2101, et seq.), and the Energy Policy Act of 2005 (42 USC 15801, et seq.).

## **3. Legal Land Description for Proposed Action**

The proposed pipelines would be located on trust land originating from the northeast side of the well pad in the NE $\frac{1}{4}$  of Section 35, Township (T) 148 North (N), Range (R) 93 West (W), 5<sup>th</sup> Prime Meridian (P.M.), Dunn County, ND, and run northeast, terminating at the existing Arrow-Phase 2 Southeast pipeline system (tie in) in the SE $\frac{1}{4}$  of Section 26, T148N, R93W, 5<sup>th</sup> P.M. This location is approximately 12.33 miles southeast of Mandaree, ND.

## **4. Scope of Work for Proposed Action**

Oil, gas, and water pipelines would be buried in either two 2.5-foot-wide trenches, spaced 5.0 feet apart, or one 5.0-foot-wide trench. Oil and gas pipelines would be no greater than 8 inches in diameter and constructed of steel. The water pipeline would also be no greater than 8 inches in diameter and constructed of Fiberspar<sup>®</sup> or similar material. Technical descriptions for the materials, corrosion rates, spill response plans, pipeline marking procedures, quality assurance/control, valve locations, boring locations, and reclamation plans are specific to Arrow Pipeline, LLC (Arrow).

Approximately 495 feet of oil, gas, and produced water pipe would be needed to complete the connection from the utility corridor to the tie in. All construction disturbances would occur within a 120-foot temporary right-of-way (ROW) and permanent surface disturbance would occur within a 50-foot ROW between the well pad and the tie in, which has been surveyed for

*Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase  
2 Southeast Pipeline System  
(December 2011)*

impacts to natural and cultural resources with no significant findings. In total, approximately 1.36 acres will be disturbed as a result of activities associated with the construction of the proposed gathering pipeline. Pipeline plats are provided in Appendix A.

## **5. Materials Information and Corrosion Rates**

Dakota-3 proposes to construct the oil, gas, and water pipelines according to the specifications used by Arrow Pipeline, LLC (Arrow). These specifications may vary if Dakota-3 uses different materials and methods to install the pipelines. If the technical specifications of the materials vary from those contained herein, D3 will provide the BIA with a revised technical specification explanation that contains the same or similar information as disclosed below.

### **Steel Pipe**

Oil and gas pipelines would be constructed using new steel pipe rated by the American Petroleum Institute (API) as 5L X52. Each steel pipe segment is coated with approximately 14 to 16 millimeters of fusion bonded epoxy coating. Further, an active cathodic protection system would be installed for all steel pipes, further reducing the likelihood of external corrosion. Each steel pipe segment would be allotted a 1/16-inch corrosion allowance; however, because of the non-corrosive nature of Bakken crude and the low concentrations of hydrogen sulfide, Dakota-3 does not anticipate any external or internal corrosion during the operating lifetime of the pipe, which, at a minimum, is estimated to be 50 years.

### **Fiberspar® or Similar Pipe**

Produced water pipelines would be constructed using a material known as Fiberspar or one with the same corrosion resistant characteristics as Fiberspar. This type of material is not subject to internal or external corrosion.

## **6. Spill Response Plan**

Arrow has developed a Spill Response Plan (Plan) (Middick 2011<sup>1</sup>) for the Phase 3 southwest pipeline. The spill preventative measures and monitoring protocols, notification procedures, spill detection and on-scene spill mitigation procedures, response activities, contacts, training and drill procedures, and response plan review and update procedures, as referenced in the plan, apply to the proposed pipelines, so long as Arrow remains the operator. A copy of the plan has been filed with the BIA and Arrow has legally committed to adhering to the procedures and requirements as defined by federal law (Title 49 Code of Federal Regulations [CFR] 194).

---

<sup>1</sup> Middick, Andy. 2011. *Operations Monitoring and Spill Response Plan*. Blackshare Environmental Solutions. Oklahoma City, Oklahoma.

*Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase  
2 Southeast Pipeline System  
(December 2011)*

## **7. Pipeline Marking Procedures**

Pipeline markers would be placed within 1,000 feet of one another, at all public road crossings, railroad crossings, creek crossings, fence crossings, and at all points of major direction change.

## **8. Quality Control/Quality Assurance Measures**

New steel pipe, rated as API 5L X52, would be purchased and inspected at the mill to ensure quality. Quality control inspectors ensure that external epoxy coating is applied to a minimum thickness of 14 millimeters on all purchased steel pipe. During construction, all welds are visually inspected for quality and completeness by qualified professionals. Once welds have passed visual inspection, they are subjected to 100 percent Non Destructive Testing. After passing these tests, the weld areas are covered for corrosion protection. After the weld areas have been covered, the external coating of the pipe is inspected using a jeepmeter to detect holes and cracks. The pipe is lowered into the trench and buried. Prior to being put into service, the steel pipe is hydrotested to approximately 1.5 times the minimum design pressure of 1,180 pounds per square inch gauge (psig). The produced water pipe is designed to sustain a minimum pressure of 750 psig and is hydrotested to approximately 900 psig prior to being approved for service.

## **9. Valve Locations**

Two valves would be installed at each end of the proposed pipelines. One valve would be installed at the well pad location while the second valve would be installed at the proposed tie-in. The installation of two valves would allow the proposed gathering pipelines to be isolated if required.

## **10. Reclamation**

### **Interim Reclamation**

Reclamation would continue over the life of the gathering line and would include the return of topsoil, and contouring and seeding of native vegetation. Initial reclamation would be required 6 months after construction, if environmentally feasible, and then following any maintenance work or additions of infrastructure. Reclamation would be required before final abandonment of the decommissioned gathering line. A successful reclamation would at all times be the responsibility of the operator.

The portions of the gathering line not used for functionality would be back-filled, assuming frozen or saturated soils are not present. Topsoil piles would be stored on site during construction. If construction is to occur during winter, non-frozen back-fill soil will be used to the extent possible and the ROW will be covered with straw or equivalent. Topsoil would be distributed as soon as practicable after the soil has defrosted. Topsoil piles would be covered to eliminate the potential for rill erosion and subsequent loss of soil during spring snow melt and precipitation events.

*Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase  
2 Southeast Pipeline System  
(December 2011)*

Applicable short- and long-term best management practices would be used to minimize and control erosion in disturbed areas. To reduce compaction, the gathering line ROW would be plowed before the stockpiled topsoil is distributed.

The disturbed areas would be reclaimed and contoured as soon as possible after construction is complete (fall/spring). The gathering pipeline ROW would be covered with stockpiled topsoil and reseeded with a seed mixture determined by the BIA. Noxious weeds would be controlled within the ROW by approved chemical or mechanical methods. If seeding of the ROW does not occur due to growing season constraints, approved weed-free hay will be distributed across the entire ROW. The presence of hay across the ROW will reduce the potential for excessive erosion as a result of spring snow melt and precipitation.

The entire ROW would be monitored for erosion, subsidence, or noxious weeds. In areas where problems are found to occur, reclamation efforts would continue until the BIA feels the ROW is successfully reclaimed. Reclamation is considered successful when:

- seeded areas are established;
- adjacent vegetative communities spread back into the disturbed areas; and
- noxious weeds are under control.

If after two growing seasons the new seeding is not successful, the BIA may require additional efforts to establish vegetation. The BIA has developed a weed management plan to treat known or likely to occur noxious weed species.

### **Final Reclamation**

Final reclamation would occur when the pipelines are decommissioned. All disturbed areas would be reclaimed, reflecting the BIA's view of oil and gas exploration and production as temporary intrusions on the landscape. All facilities would be removed and work areas would be leveled or backfilled as necessary, scarified, recontoured, and seeded.

## **11. Resource Surveys**

SWCA Environmental Consultants (SWCA) conducted natural resource surveys for wetlands, threatened and endangered species and habitat, migratory birds and active nests, and bald and golden eagles and their nests at the well pad location and surrounding area on July 11, 2011. BIA Environmental Specialist Jeff Desjarlais approved the location of the proposed pipelines on July 11, 2011. Both migratory bird and potential golden eagle foraging habitat were observed in this area. In addition, surveys that were conducted in October and November of 2010 were used to cover the entire ROW.

SWCA archaeologists inventoried approximately 3.62 acres using an intensive pedestrian methodology on July 11, 2011 (Schleicher 2011<sup>2</sup>). During the inventory, no historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria

---

<sup>2</sup>Schleicher, Jolene. Chandler Herson. 2011. *A Class I and Class III Cultural Resource Inventory of the Paul Peter Coffee #35H Well Pad and Utility Corridor*, Fort Berthold Indian Reservation, Dunn County, North Dakota.



*Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase  
2 Southeast Pipeline System  
(December 2011)*

(Title 36 Code of Federal Regulations 60.6) for inclusion on the National Register of Historic Places (NHPA). In addition, surveys that were conducted in October and November of 2010 were used to cover the entire ROW.

## **12. Potential Effects to Cultural and Natural Resources**

Potential direct impacts to cultural resources would occur as a result of disturbance and/or the loss of sites eligible for the NHPA. All potential impacts as a result of the proposed action were mitigated via field survey and subsequent avoidance of any eligible cultural resource sites within the proposed ROW.

Potential direct impacts to natural resources may include the loss of native vegetation and wildlife habitat, soil disturbance, and erosion during construction that may adversely affect air and water quality. Impacts would be mitigated by using best management practices, such as using secondary containment on areas where there are steep inclines and drainages, and using matting and straw waddles on those steep areas during construction to minimize erosion. Specifically, the southern edge of the well pad expansion area is near a drainage. Straw waddles would be placed, and matting would be installed, so as to prevent erosion into this drainage. In addition to the berm added as standard BMP, secondary containment in the form of fill would be placed to prevent any event from moving off site.

In total, construction activities would disturb approximately 1.36 acres. Potential indirect effects of the proposal could include release of sediment or fluids from the well pad, construction noise or traffic disturbance of general wildlife, and possible introduction of noxious weeds. Potential cumulative impacts of the proposal plus other foreseeable future oil and gas development on the Fort Berthold Indian Reservation could include habitat fragmentation from construction of other well pads and roads. The cumulative effect of the changed action is anticipated to be negligible. Any potential direct effects would be mitigated by surveying for and avoiding any eligible cultural resource sites; implementing an approved stormwater pollution prevention plan and erosion control devices; avoiding any wetlands and any federally listed threatened or endangered species or designated critical habitat; avoiding nesting migratory birds; and completing reclamation using appropriate native vegetation.

Any potential indirect effects would be mitigated by; stockpiling and re-using topsoil for reclamation; implementing best management practices for controlling introduction of noxious weeds; and minimizing the length of time between drilling and reclamation.

Based on the resource surveys, evaluation of potential effects and mitigation measures, and consistency with the applicable NEPA documents, no significant direct, indirect, or cumulative impacts to natural and cultural resources are anticipated as a result of the changes proposed in this addendum.

## **13. Applicable National Environmental Policy Act (NEPA) Document(s)**

- Environmental Assessment: *Arrow Midstream Holdings, LLC, Phase 2 Southeast Pipeline: Dunn County, North Dakota* (FONSI April 2011).

*Addendum to Environmental Assessment to Authorize Land Use for the Installation of Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase 2 Southeast Pipeline System  
(December 2011)*

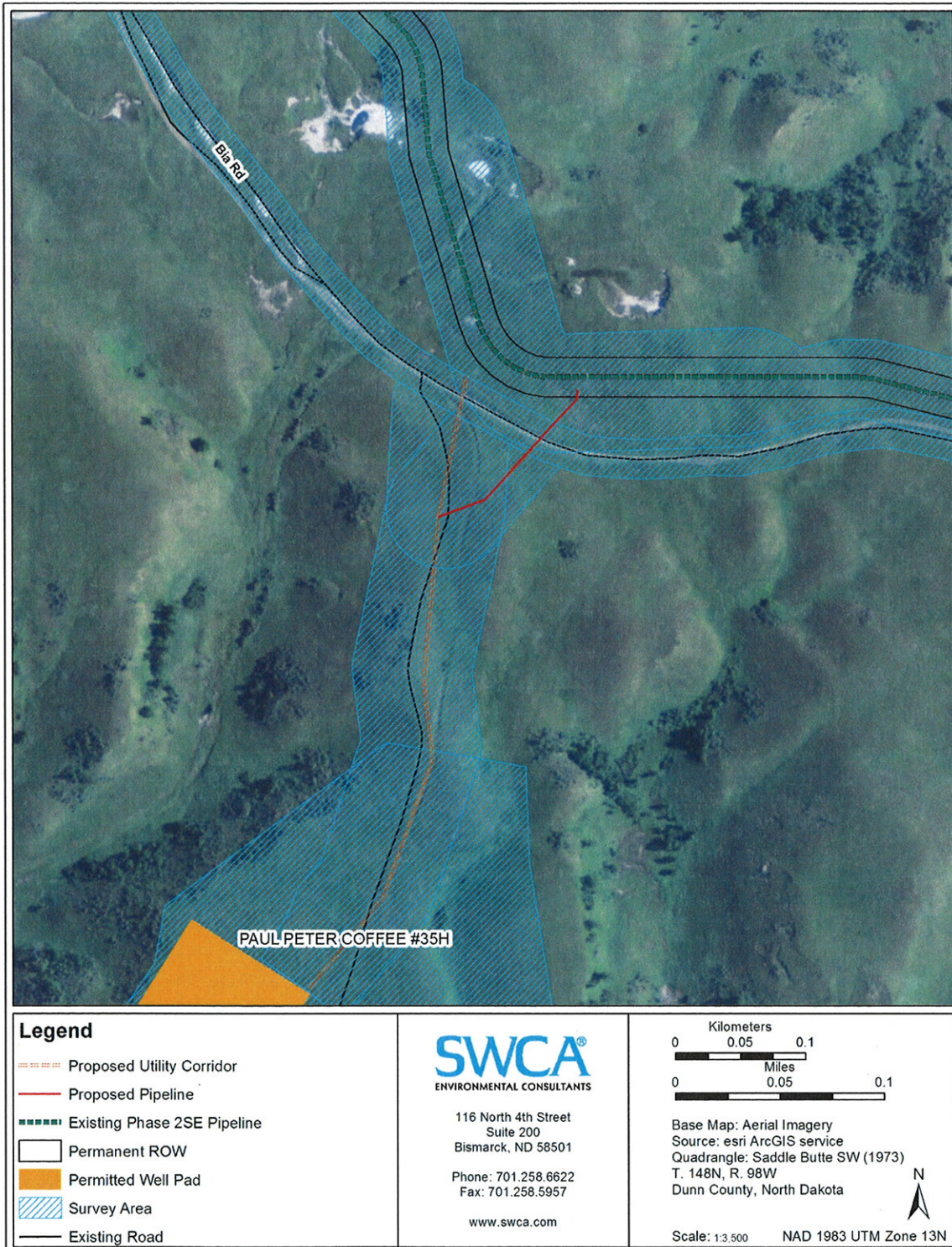
- Environmental Assessment: *Up to 13 Bakken/Three Forks Exploratory Oil and Gas Wells On Three Well Pads: Bird #30-31HC, Charles Blackhawk #31-30HC, Paul Peter Coffee #35HA, #35HC, and #35HD* (FONSI November 2011).
- Environmental Assessment: *Six Bakken Exploratory Oil Wells: Dakota-3 Goodbird #36-25H, Dakota-3 Black Hawk #1-12H, Dakota-3 Packineau #4-32H, Dakota-3 Paul Peter Coffey #4-35H, Dakota-3 Mann #16-27H, Dakota-3 Wicker #34-27H* (FONSI February 2010)

#### **14. NEPA Adequacy Criteria**

This document has identified one previously prepared NEPA document, which adequately describes the environmental consequences of the newly proposed action described herein, and meets the following NEPA Adequacy Criteria.

1. The proposed action is substantially the same action and at the site specifically analyzed in the existing NEPA document.
2. The range of alternatives is reasonable with respect to the current proposed action in the existing NEPA document, which appropriately considers and analyzes current environmental concerns, interests, and resource values.
3. The existing analysis and conclusions are adequate in the existing NEPA document. The analysis is still valid in light of new studies or resource assessment information.
4. The methodology and analytical approach used in the existing NEPA document continues to be appropriate for the proposed action.
5. The direct and indirect impacts of the proposed action are unchanged from those identified in the existing NEPA document.
6. The cumulative impacts that would result from implementation of the proposed action are unchanged from those analyzed in the existing NEPA document.
7. A 30-day comment period involving public input and interagency review was used in the development of the existing NEPA document.

*Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase  
2 Southeast Pipeline System  
(December 2011)*



**Figure 1. 1 Paul Peter Coffee #35H well pad and proposed gathering pipelines location**

*Addendum to Environmental Assessment to Authorize Land Use for the Installation of  
Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase  
2 Southeast Pipeline System  
(December 2011)*

**APPENDIX A**

**Pipeline Layout Plats for the Proposed Paul Peter Coffee #35H Gathering  
Pipelines**





# **Notice of Availability and Appeal Rights**

**Dakota-3 E&P: Addendum to Environmental Assessment to Authorize Land Use for the Installation of Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase 2 Southeast Pipeline System**

**The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to an Addendum to Environmental Assessment to Authorize Land Use for the Installation of Gathering Pipelines Connecting the Paul Peter Coffee #35H Wells to the Existing Arrow-Phase 2 Southeast Pipeline System on the Fort Berthold Reservation as shown on the attached map. Construction by Dakota-3 E&P Resources is expected to begin in 2012.**

**An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Earl Silk, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant Impact (FONSI).**

**The FONSI is only a finding on environmental impacts – it is not a decision to proceed with an action and *cannot* be appealed. BIA's decision to proceed with administrative actions *can* be appealed until January 19, 2012, by contacting:**

**United States Department of the Interior  
Office of Hearings and Appeals  
Interior Board of Indian Appeals  
801 N. Quincy Street, Suite 300, Arlington, Va 22203.**

**Procedural details are available from the BIA Fort Berthold Agency at 701-627-4707.**



**Project locations.**



<p><b>Legend</b></p> <ul style="list-style-type: none"> <li> Proposed Utility Corridor</li> <li> Proposed Pipeline</li> <li> Existing Phase 2SE Pipeline</li> <li> Permanent ROW</li> <li> Permitted Well Pad</li> <li> Survey Area</li> <li> Existing Road</li> </ul>	<p><b>SWCA</b><sup>®</sup> ENVIRONMENTAL CONSULTANTS</p> <p>116 North 4th Street Suite 200 Bismarck, ND 58501</p> <p>Phone: 701.258.6622 Fax: 701.258.5957</p> <p><a href="http://www.swca.com">www.swca.com</a></p>	<p style="text-align: center;">Kilometers 0    0.05    0.1</p> <p style="text-align: center;">Miles 0    0.05    0.1</p> <p>Base Map: Aerial Imagery Source: esri ArcGIS service Quadrangle: Saddle Butte SW (1973) T. 148N, R. 98W Dunn County, North Dakota</p> <p style="text-align: right;">N </p> <p>Scale: 1:3,500    NAD 1983 UTM Zone 13N</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------