

Chapter 1

PURPOSE OF AND NEED FOR ACTION

1.0 INTRODUCTION

Fidelity Exploration & Production Company (Fidelity) proposes development of coal bed natural gas (CBNG) in the Tongue River-Decker Mine area, this project is called the Tongue River-Decker Mine East Project POD (plan of development). The project area is located within the CX Field (approved by the Montana Board of Oil & Gas Conservation), Big Horn County of southeastern Montana, T. 9 S., R. 40 E., T. 9 S., R. 41 E. (Map 1.3-1, Map 1.3-2, Map 1.3-3 and Map 1.3-4). Fidelity's proposal includes the development, operation, and reclamation of CBNG wells and various facilities on leased lands (surface and/or oil and gas mineral estate) in the Decker Mine East POD area. The proposed project is located on private and BLM administered surface. A more detailed description of the Plans of Development and Proposed Action is found in Chapter 2.

This Environmental Assessment (EA) was prepared by the Bureau of Land Management (BLM), in cooperation with the Montana Department of Environmental Quality (MDEQ). The EA analysis tiers to and incorporates by reference the information and analyses contained in the *Montana Statewide Oil and Gas Final Environmental Impact Statement and Amendment of the Powder River and Billings RMPs* (MT FEIS) approved by BLM on April 30, 2003, and by MDEQ on August 7, 2003. The EA addresses site-specific impacts and mitigation measures that are not covered in the MT FEIS. The EA completes the environmental review requirements of NEPA for BLM.

Additionally, interim management measures were ordered by the United States District Court for the District of Montana Billings Division, April 5, 2005. The Miles City Field Office will use specific procedures to process individual application for permit to drill (APDs) and PODs for coal bed natural gas wells in accordance with the District Court Order dated April 5, 2005 until the Record of Decision is signed for the *Supplement to Montana Statewide Oil and Gas Final Environmental Impact Statement and Amendment of the Powder River and Billings RMPs* (SEIS). These procedures will apply to the entire BLM planning area covered by the 2003 Statewide Final EIS/Amendment (Powder River and Billings RMP Areas). All Onshore Oil and Gas Order Number 1 processing times and applicant notification requirements will be followed. After completion of the NEPA analysis for individual APDs or PODs, MCFO will approve, approve with modifications or deny the APDs or PODs. The NEPA analysis will be tiered to the 2003 Statewide Final EIS/Amendment and include review to insure proposed actions are processed consistent with the management objectives of the Preferred Alternative being considered in the *Supplement to Montana Statewide Oil and Gas Final Environmental Impact Statement and Amendment of the Powder River and Billings RMPs* (SEIS) and the *Interim Procedures for Processing Coal Bed Natural Gas Applications for Permit to Drill (APDs)/Plans of Development (PODs) Prior to the Record of Decision for the Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement (SEIS) and Amendment of the Powder River and Billings Resource Management Plans January 2008*, found in Appendix E.

1.1 PURPOSE OF AND NEED FOR ACTION

The purpose of the Proposed Action is to develop the CBNG resources that may be found in coal seams on federal leases within the project area, consistent with the MT FEIS. The need for Fidelity's Plans of Development is to ensure that CBNG development of its leases occurs in an orderly, efficient and environmentally responsible manner that provides measures to protect the environment and surface owner assets.

1.2 CONFORMANCE WITH THE APPLICABLE LAND USE PLAN

BLM considers this proposed action under the requirements of the Mineral Leasing Act (MLA), the Federal Land Policy Management Act (FLPMA) and the BLM regulations at 43 CFR 3160 and other applicable laws and regulations, including Onshore Order #1.

As required by 43 CFR 1610.5, the Proposed Action is in conformance with the terms and the conditions of the BLM 1984 *Powder River Resource Management Plan* (RMP), as amended by the Miles City District

Oil and Gas FEIS/Amendment (BLM, 1994) and the *Montana Statewide Oil and Gas FEIS/Amendment of the Powder River and Billings RMPs* (BLM, 2003).

This site-specific EA tiers to and incorporates by reference the information and analyses contained in the *Montana Statewide Oil and Gas Final Environmental Impact Statement and Amendment of the Powder River and Billings RMPs* (MT FEIS) approved April 30, 2003, pursuant to 40 CFR 1508.28 and 1502.21. This project EA addresses site-specific resources and/or effects that are not covered in the MT FEIS, due to its programmatic nature.

1.2.1 Other Relevant Documents

- Draft Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Amendment of the Powder River and Billings Resource Management Plans, December 2006
- Final Environmental Impact Statement and Proposed Plan Amendment for the Powder River Basin Oil and Gas Project (WY FEIS), April, 2003.
- EA's prepared by DNRC for beneficial use of produced water at the Spring Creek and Decker Coal Mines, December, 2002 and June, 2003 respectively.
- EA prepared by BLM for the Fidelity Badger Hills Plan of Development, approved February 9, 2004 (MT-020-2004-134).
- EA prepared by BLM, MDEQ and MBOGC for the Powder River Gas – Coal Creek Plan of Development, approved November 19, 2004 (MT-020-2004-58).
- EA prepared by BLM for the Fidelity Dry Creek Plan of Development, approved December 16, 2004 (MT-020-2004-298).
- EA prepared by BLM, MDEQ and MBOGC for the Fidelity Coal Creek Plan of Development, approved January 19, 2005 (MT-020-2004-297).
- EA prepared by MDEQ for the MPDES permits for discharge of treated and untreated produced water into the Tongue River (MPDES Permits MT 0030724 and MT0030457), approved February 3, 2006.
- EA's prepared by MDEQ for the Montana Air Quality Permits (MAQP) Rancholme 14 Battery (MAQP #3383), Rancholme #2 Battery (MAQP #3388), Montana Royalty #3 Battery (MAQP #3386), and Decker #6 Battery (MAQP #3389). In addition, an existing sales battery, BCPL Symons Central Compressor Station (MAQP #3250).
- EA prepared by MBOGC, MDEQ and BLM for the Deer Creek North and Pond Creek Plans of Development, approved by MBOGC in August 2005.
- EA prepared by MBOGC for the Deer Creek North Amendment Plan of Development, approved January 2006.

1.3 DECISIONS REQUIRED

1.3.1 Bureau of Land Management

BLM must determine whether to:

- approve the proposed action,
- approve selected federal components of the proposed action (as presented in Table 2.5-1), or
- modify the proposed action with mitigation measures and monitoring, in addition to those measures proposed by the operator, that may be necessary to ensure that undue environmental effects will not result from Federal actions, or
- deny approval of the POD and APDs



The project maps (1.3-2, 1.3-3 and 1.3-4) show the project boundary, existing and proposed wells, access roads, pipelines (water and gas), power lines, and the central gathering/metering/water processing facilities within the POD area.

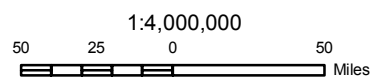
Tongue River - Decker Mine East POD Vicinity Map

Map 1.3-1



Legend

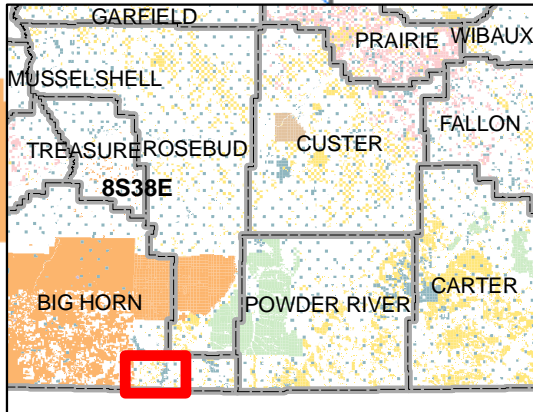
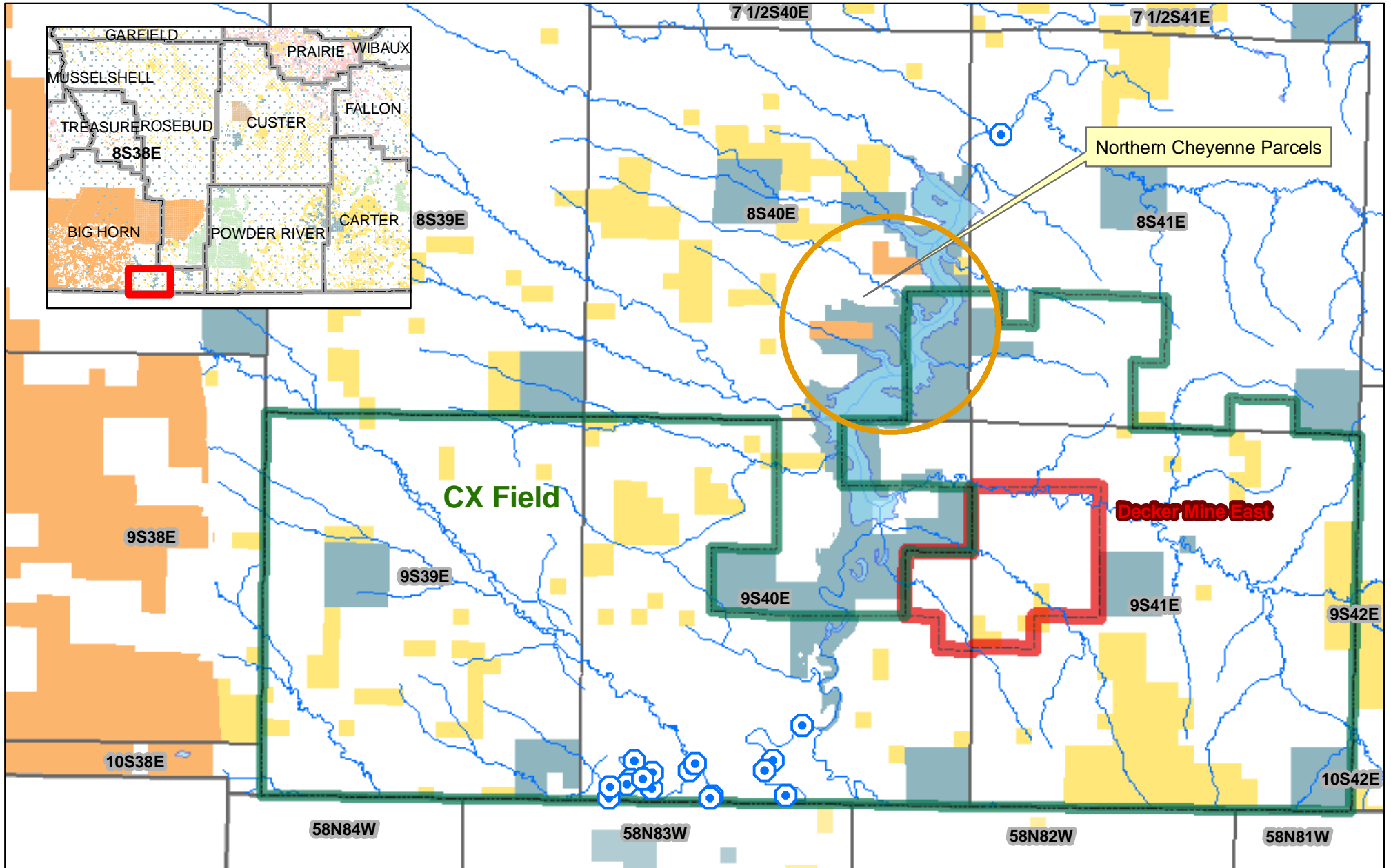
-  Tongue River - Decker Mine East POD
-  Native American Reservations













CBM Area Map

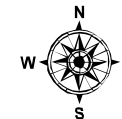
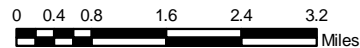
September 2008



-  MPDES Outfalls
-  CX FIELD
-  Tribal Lands
-  Streams
-  Decker Mine East
-  Bureau Of Land Management
-  Private Lands
-  State of Montana

Projected Coordinate System: NAD 1983 Albers
 Geographic Coordinate System: GCS North American 1983
 Datum: D North American 1983

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 MILES CITY FIELD OFFICE

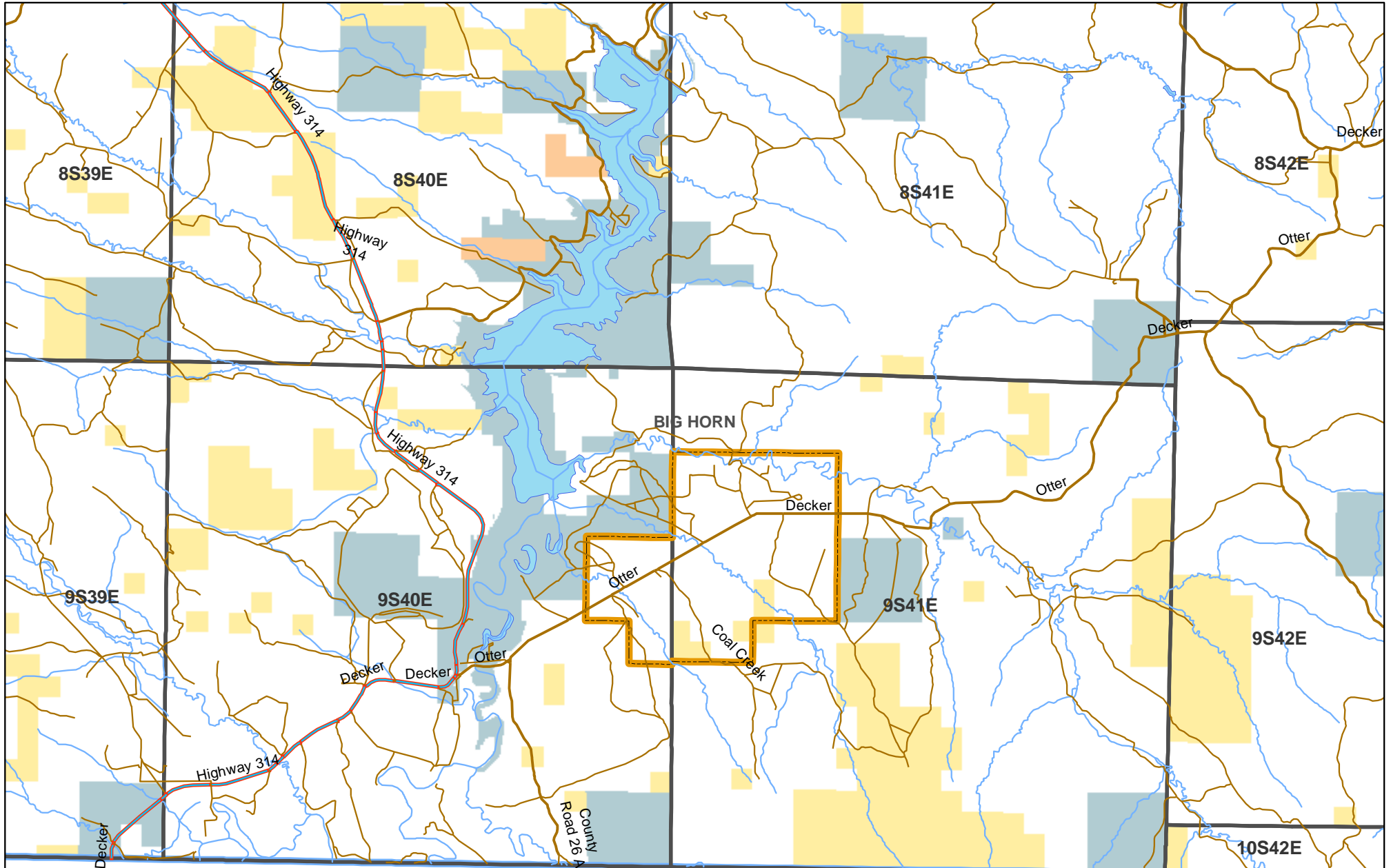
CAUTION:
 Land ownership data is derived from less accurate data than the 1:24000 scale base map. Therefore, land ownership may not be shown for parcels smaller than 40 acres, and land ownership lines may have plotting errors due to source data.

No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.



Fidelity E&P Decker Mine East POD

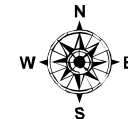
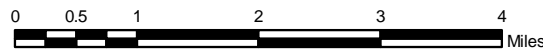
June 2008



Decker Mine East POD Boundary

Projected Coordinate System: NAD 1983 Albers
 Geographic Coordinate System: GCS North American 1983
 Datum: D North American 1983

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Map 1.3-4

see attached map

1.4 ISSUE IDENTIFICATION

Relevant issues were identified through a project scoping letter dated February 9 and 15, 2005; technical staff review based on issues highlighted during the 2003 MT FEIS & 2006 Draft SEIS, the 2004 Tongue River-Badger Hills POD EA, the 2004 Powder River Gas-Coal Creek POD EA, the 2004 Tongue River-Dry Creek POD EA and the 2005 Tongue River-Coal Creek EA, from landowner, agency and tribal consultation; and site inspections of the project area. Relevant issues include the following:

- Air quality effects from CBNG development activities including drill rig emissions (exhaust emissions as well as dust generated by drilling the wells) and fugitive dust (construction activities as well as road dust) and compliance with all applicable air quality rules and standards, including ambient air quality standards
- Cumulative Impacts of this action when considered with past, present and reasonably foreseeable future actions
- Noxious weed introduction and proliferation
- Effects to springs and wells due to groundwater drawdown (pumping water out of coal seams) and effectiveness of Water Mitigation Agreements
- Habitat fragmentation and disturbance effects to wildlife habitat, particularly sage grouse
- Public Health and Safety
- Potential for methane migration and methane drainage
- Disturbance and reclamation activities associated with the PODs
- Surface water quality degradation
- Cultural Resource impacts
- Coal Mine/CBNG conflicts (ground water recovery and overlap in development areas)

1.5 FEDERAL, STATE AND LOCAL PERMITS OR REQUIRED CONSULTATION

Montana Air Quality Permits

This Environmental Assessment (EA) is prepared in conjunction with the Montana Department of Environmental Quality (MDEQ), which has jurisdiction over sources of air pollution in the State of Montana, except those areas considered tribal lands. Therefore, the Air Resources Management Bureau must be consulted to make permit determinations regarding the use of air contaminant sources that would be used as part of the proposed coal bed natural gas (CBNG) exploration and development (drill rigs, emergency flares, etc.), as well as installation of compressor engines/turbines.

Based on information provided by Fidelity, the drill rig proposed to be used would utilize a 400 horsepower (hp) diesel engine. The MDEQ completed an emission inventory using the information provided by Fidelity and emission factors obtained from the United States Environmental Protection Agency's (EPA) Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I. The MDEQ determined that a Montana Air Quality Permit (MAQP) is not required for the exploration portion of the Decker Mine East Project because the potential to emit (PTE) of the entire project is well below the MAQP threshold of 25 tons per year, except for nitrogen oxides (NO_x) emissions from the drill rig stationary engine. However, ARM 17.8.744(1)(i) exempts drill rigs that have a PTE less than 100 tons per year and that do not operate in the same location for more than 12 months from the need to obtain an MAQP. MDEQ's permit determination is conservative because drilling activities were calculated based on 8,760 hours per year and the entire drilling/exploration portion of the project will be completed within approximately 3-4 months. Technically, for an MAQP determination, each hole would be considered a separate project. Considering emissions from the entire project ensures that the analysis used to make the MAQP determination for exploration is conservative. The emission potential of the proposed exploration project is summarized in Table 1.5-1.

1.5-1 Emission Inventory – MAQP Determination – Exploration

<i>Emission Source</i>	Tons/Project						
	TSP	PM ₁₀	PM _{2.5}	NO _x	VOC	CO	SO _x
Drill Rig(s) – (Engine Emissions)	3.85	0.00	3.85	54.31	4.33	11.70	3.59
Drill Rig(s) – (Drilling Emissions)	0.23	0.23	0.23	0.00	0.00	0.00	0.00
Well Testing (Gas Flaring)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust – (Disturbed Acres)	22.48	22.48	22.48	0.00	0.00	0.00	0.00
Vehicle Traffic – (non-paved roads)	11.34	5.10	5.10	0.00	0.00	0.00	0.00
TOTAL	37.90	27.81	31.66	54.31	4.33	11.70	3.59

Although MDEQ determined that an MAQP is not required for the proposed exploration project, MDEQ would need to be contacted to determine whether an MAQP would be required for any future development, such as installing compressor engines, turbines, or any other sources of air contaminants that are outside the scope of the proposed project or that do not already have a valid MAQP.

All facilities that would be used to extract and transport the CBNG have already received MAQPs from MDEQ. Based on information provided by Fidelity, for Decker Mine East, two permitted batteries would be used to extract the gas. The batteries that would be used for Fidelity’s Decker Mine East POD are the Bitter Creek Pipelines, LLC (BCPL) Holmes 29 Battery (MAQP #3335, formerly named Rancholme 29 Battery) and Decker 17 Battery (MAQP #4066). In addition, an existing sales battery, BCPL Symons Central Compressor Station (MAQP #3250), would also be used for Fidelity’s Decker Mine East POD. MDEQ has issued final MAQPs for all batteries associated with this project.

Montana Pollutant Discharge Elimination System Permits (MPDES permits)

The MDEQ has been granted primacy from the -EPA for issuing waste water discharge permits for discharges into state waters. Fidelity’s existing MPDES permits (MT 0030724 and MT0030457) would be used to manage water produced by this project. MT0030457 allows for the discharge of untreated CBNG water at rates that vary by season from 1,600 gallons per minute (gpm) to 2,500 gpm to the Tongue River. MT0030724 allows for the discharge of treated CBNG water at up to 1,700 gpm to the Tongue River. Both of these permits were approved by the MDEQ on February 3, 2006.

Federal 401 Certification

§401 of the Federal Clean Water Act (CWA) states that "Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate... that any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of this Act... If the State... fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence." (CWA §401.a.1)

According to Montana's 401 Certification procedures (ARM 17.30, Sub-Chapter 1), an application is deemed complete if the department has not made a determination within 30 days after receipt of the application or, subsequent to receipt of the initial application, within 30 days of receipt of materials submitted by the applicant that supplement the application (ARM 17.30.103.6). These procedures also specify that "If the department does not notify the applicant of a tentative determination within 30 days after the application is deemed to be complete, the department is deemed to have waived certification." (ARM 17.30.106.1).

Fidelity plans to submit an application for a 401 certification once the BLM has confirmed that all deficiencies have been resolved. This 401 certification will need to be approved or waived prior to BLM approval of this POD. MDEQ has indicated that it will likely waive certification for this POD since the activities are covered by MPDES permits (T. Reid, personal communication 6/23/08).

Storm Water Discharge Permit

The owner or operator of any activity, which disturbs greater than one acre of land and has the potential to discharge storm water runoff to state waters, including ephemeral drainages or intermittent tributaries, must submit a Notice of Intent (NOI) under the “General Permit for Storm Water Discharges Associated with Construction Activity” (“General Permit” – MTR100000). The General Permit requires that the owner or operator develop a Storm Water Pollution Prevention Plan (SWPPP), including Best Management Practice (BMP), maintenance, self inspection and record keeping procedures in order to prevent significant sediment from entering state waters and causing a violation of any state water quality standard. The NOI is effective upon receipt by the MDEQ provided that the NOI package is complete. The MDEQ may deny coverage under the General Permit if the project does not comply with terms and conditions of the permit or based on the criteria of ARM 17.30.1341(4). The operator may terminate coverage under the General Permit after the site has achieved 70 percent of the pre-disturbance vegetative coverage. Fidelity submitted the NOI for a General Storm Water Discharge permit for this POD to the MDEQ on April 6, 2007. MDEQ issued Storm Water Authorization MTR102560 for the Decker Mine East POD on April 10, 2007. This permit covers all of the disturbance within the POD boundary, including the Decker 17 battery site. There would also be some disturbance from the connection of the 21-1991 well to the Rancholme 29 battery site; however this disturbance is covered by Storm Water Authorization MTR101681.

MBOGC Earthen Pit or Pond Permit

MBOGC approves permits for the construction and operation of reservoirs/pits designed to store water produced in association with the CBNG wells. This POD would utilize two existing lined off-channel impoundments associated with the water treatment plant (34E-3490 & 12-3490). A permit to construct 34E-3490 as an unlined impoundment was approved by MBOGC on April 21, 2006. A sundry for modification of 34E-3490 to a lined impoundment was approved by MBOGC on May 22, 2006. A permit for the construction of 12-3490 as a lined impoundment was approved by MBOGC on June 25, 2007. These impoundments, along with their groundwater monitoring plans, have also been approved by MDEQ as part of the treatment works for MPDES permit MT0030724.

Surface Use Agreement

The operator must certify that an agreement with the private surface owners exists or, in lieu of an agreement, that the requirements of Federal Oil and Gas Onshore Order No. 1 have been met. Fidelity has provided certification of these surface use agreements.

Water Mitigation Agreements

Montana Codes Annotated (MCA) 82-11-175 (3) requires that CBNG operators “...shall notify and offer a reasonable mitigation agreement to each appropriator of water who holds an appropriation right or a permit to appropriate under Title 85, Chapter 2, that is for ground water and for which the point of diversion is within 1 mile of the coal bed methane well; or one-half mile of a well that is adversely affected by the coal bed methane well. The mitigation agreement must address the reduction or loss of water resources and must provide for prompt supplementation or replacement of water from any natural spring or water well adversely affected by the coal bed methane well. The mitigation agreement is not required to address a loss of water well productivity that does not result from a reduction in the amount of available water because of production of ground water from the coal bed methane well.”

Additionally, in accordance with the April 5, 2005 District Court Order, “BLM shall not approve an APD unless the operator has certified that water mitigation agreements are in place for all wells and springs located within one mile of federal wells. BLM shall require each agreement to include measures to remedy methane-related impacts. BLM shall require operators to conduct baseline and periodic monitoring of all water wells and springs covered by the agreement.” Fidelity has provided certification that they have water mitigation agreements “...in place with all owners of water wells or springs of record within one mile of

Federal wells. These agreements also include measure[s] to remedy methane-related impacts and baseline and periodic monitoring”.

SHPO Consultation

BLM’s approval of the APDs and associated infrastructure developments is considered a Federal Undertaking as defined in Section 106 of the National Historic Preservation Act and its implementing regulations found in 36 CFR 800. BLM’s Cultural Resource Program in Montana operates under a National Programmatic Agreement with an implementing protocol with the Montana State Historic Preservation Office (SHPO). A provision in the protocol provides for case by case review for controversial projects. BLM has consulted with the Montana SHPO under this provision. The BLM has compiled and reviewed all of the cultural resource inventory information pertaining to the POD and provided the information to the SHPO on 07//25/08 BLM has determined that the proposed Decker Mine East POD would have no adverse effect to historic properties. This determination was based on a lack of direct impacts to eligible historic properties or mitigation of those impacts and implementation of monitoring condition of approval. The SHPO concurred with BLM’s Determination of No Adverse Effect for the Decker Mine East POD on July28, 2008.

Tribal Consultation

The Bureau of Land Management recognizes its responsibilities to consult with the Native Americans in accordance with Section 106 of the National Historic Preservation Act. To that end, 13 Tribal groups consisting of the Northern Cheyenne tribal historic preservation officer, the Crow Cultural Commission, Fort Peck Tribes, Lower Brule Sioux Tribe, Rosebud Sioux Tribe, Pine Ridge Sioux, Cheyenne River Sioux, Eastern Shoshone Tribe, Standing Rock Sioux, Northern Arapahoe Tribe, Blackfeet Tribe, Ft. Belknap Community Council, and the Chippewa-Cree Tribe of the Rocky Boy’s Reservation, were sent a letter dated June 2, 2008 seeking Native American input on the POD. The letter summarized the proposed undertaking and solicited tribal input on the proposed development.

The Northern Cheyenne Tribe expressed an interest in CBNG development and wished to be consulted further on the project. A field tour with the Northern Cheyenne THPO, for the Decker Mine East POD was conducted on August 13, 2008.

The BLM’s Miles City Field Office believes it has made a good faith effort to consult by providing opportunity for consultation with the Northern Cheyenne and other Tribal interests for consultation on this undertaking.

FWS Consultation

BLM and the FWS conducted an informal consultation on Fidelity’s proposed Decker Mine East POD (6/12/08) to discuss requirements for Bald Eagles now that they have been de-listed from the Threatened/Endangered (T/E) list. With the Bald Eagle being de-listed the BLM did not have to officially consult with the FWS under Section 7 Consultation under the Endangered Species Act (50 CFR 402.14). However, bald eagles are still protected under the Bald and Golden Eagle Protection Act, as well as the Migratory Bird Treaty Act. Both acts prohibit the killing, selling or otherwise harming eagles, their nests or eggs. Subsequently, protection measures are required consisting of an ongoing monitoring program to determine activity status of nesting bald eagles and to assess if CBNG related activity affects that status. Additionally, raptor protection for the overhead power lines has been included in the Preferred Alternative.

A “no effect” determination was made for interior least tern, whooping crane, black-footed ferret, gray wolf, grizzly bear, pallid sturgeon, Ute ladies’ tresses, Montana arctic grayling, and warm spring zaitzavian beetle, and was concurred with by the FWS. No further discussion of these species will occur in this EA.