

# **MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

## **RECORD OF DECISION**

**for**

### **Montana Statewide Oil and Gas Environmental Impact Statement**

**August 7, 2003**

## **I. Introduction**

The Montana Department of Environmental Quality (DEQ), the Montana Board of Oil and Gas Conservation (MBOGC), and the Bureau of Land Management (BLM) jointly prepared the Montana Final Statewide Oil and Gas Environmental Impact Statement (EIS) and Proposed Amendment of the Powder River and Billings Resource Management Plans (RMP). The Final EIS focused on the potential impacts of coal bed methane (CBM) exploration and production throughout the state, with emphasis on the 16 counties of south-central and southeastern Montana where CBM development is most likely to occur. The effects of anticipated conventional oil and gas development were also analyzed.

DEQ and the MBOGC are responsible for compliance with the Montana Environmental Policy Act (MEPA) and the BLM is responsible for compliance with the National Environmental Policy Act (NEPA). This document represents the Record of Decision (ROD) for DEQ and does not in any way make decisions for other state agencies or for the BLM.

The Final EIS was used to analyze options for CBM development including mitigating measures that would help minimize the environmental and social impacts related to these activities. The alternatives analyzed provide a range of management options for CBM development.

The preferred alternative (Alternative E) is the State permitting agencies' and BLM's proposed outline for altering the current oil and gas program to allow for CBM development.

The MBOGC has managed CBM development based on the Stipulation and Settlement Agreement reached in the First Judicial District Court, Lewis and Clark County, between the MBOGC and the Northern Plains Resource Council, Inc., on June 19, 2000. The Stipulation also required the preparation of a comprehensive supplemental statewide programmatic EIS, pursuant to MEPA (75-1-101 *et seq.*, MCA), addressing the environmental consequences of CBM exploration, development, production, reclamation, and closure.

DEQ acted as a co-lead agency on the EIS through its permitting authority under the Montana Water Quality Act (Title 75, Chapter 5, MCA) and the Clean Air Act of Montana (Title 75, Chapter 2, MCA). DEQ will be responsible for air quality and water quality permitting during

future CBM development. This ROD describes how air and water quality permitting of coal bed methane development will occur. This ROD is not intended to document decision-making by any other agency.

## **II. Water Quality**

DEQ, under the authority of the Montana Water Quality Act (Title 75, Chapter 5, MCA), regulates the discharge of pollutants into state waters through the adoption of water quality standards and the permit process. A state water is any body of water, irrigation system, or drainage system, on the surface or under ground, except ponds and lagoons used solely to treat, transport, or impound pollutants, and irrigation water that is used up and not returned to a state water.

### **A. Standards**

#### **1. In General**

Water quality standards specify what changes in water quality are allowed as a result of discharges to state waters and establish a basis for wastewater discharge permitting. DEQ's water quality standards program has two levels of protection: (1) protection of the designated uses of waters, and (2) prevention of significant degradation of high quality waters. In order to achieve the first purpose, state waters are classified according to the uses they are capable of supporting. Standards designed to protect those specific uses are then applied to those waters. For the nondegradation process, significance levels are established for new or increased discharges. If a proposed discharge would exceed the significance level, the discharger must apply for an authorization to degrade under 75-5-303, MCA.

#### **2. Streams**

Water produced from coal bed methane development contains a number of constituents. Of major concern is the electrical conductivity (EC) and sodium adsorption ratio (SAR) of this water because high EC and SAR impairs the usefulness of water for irrigation.

Effective April 25, 2003, the Board of Environmental Review has adopted the following standards for electrical conductivity (EC) and sodium adsorption ratio (SAR) for streams in the Powder River Basin. The irrigation-season standards for the Tongue River apply year round for the Tongue River Reservoir.

	Powder River		Little Powder River		Tongue River		Rosebud Creek		All Tributaries	
	EC	SAR	EC	SAR	EC	SAR	EC	SAR	EC	SAR
Irrigation Season (2 March – 31 October)										
Monthly average	2,000	5.0	2,000	5.0	1,000	3.0	1,000	3.0	500	3.0
Maximum	2,500	7.5	2,500	7.5	1,500	4.5	1,500	4.5	500	4.5
Non-irrigation Season (1 November – 1 March)										
Monthly average	2,500	6.5	2,500	6.5	1,500	5.0	1,500	5.0	500	5.0
Maximum	2,500	9.75	2,500	9.75	2,500	7.5	2,500	7.5	500	7.5

(The EC standard is in units of microSiemens/centimeter or micromhos/centimeter)

For discharge of coal bed methane water to state waters in other basins not covered by the rule, the narrative standard, contained in ARM 17.30.637 is applicable. That rule prohibits discharges which will create concentrations that are toxic or harmful to human, animal, plant or aquatic life.

For other constituents contained in coal bed methane waters, the state's numeric and narrative water quality standards and nonsignificance criteria, which are applicable to those constituents generally, are applicable to discharge of coal bed methane waters.

The Northern Cheyenne Tribal Council adopted numerical standards for EC and SAR for the Tongue River and Rosebud Creek on May 28, 2002. If approved by the Environmental Protection Agency, the standards will apply to streams and their tributaries within the boundaries of the Reservation. The Tribe also adopted indicator values for total dissolved solids (TDS) that will be used to monitor conditions and trends of these streams. Those standards are as follows:

Tongue River and Rosebud Creek (within Reservation)	Irrigation Season (1 April – 15 November)	Criteria Applicable All Year	
		EC (30-day average)	EC (instantaneous maximum)
Southern Boundary	1,000	2,000	2.0
Northern Boundary	1,500	2,000	3.0
Tributaries	1,500	2,000	3.0

These standards have not yet been approved by the Environmental Protection Agency.

### 3. Ponds

Where CBM produced water is impounded in ponds constructed in drainages, the water must meet the standards applicable to the drainage. The standard for EC in these ponds is therefore 500 microSiemens/centimeter or micromhos/centimeter. The SAR standard varies. Ponds that are isolated from drainages and are within the definition of "state waters" contained in section

75-5-103, MCA, of the Water Quality Act, must meet the standards that became effective on June 27, 2003. These standards require that the water be maintained as marginally suitable for irrigation after treatment or mitigation measures. Because of the quality of the water, the designated beneficial uses are wildlife and livestock watering, aquatic life other than fish, secondary contact recreation, and irrigation after treatment. EC is limited to 3,000 microSiemens/centimeter. If, on the other hand, isolated ponds are determined not to be state waters, then a general MPDES permit will be required. That general permit will require that any discharge to the pond meet an effluent limit of 2,500 total dissolved solids. This standard maintains the quality of the water for livestock and wildlife watering. Under the terms of the permit, the water must be used for this purpose.

#### **4. Ground water**

No new water quality standards have been developed for ground water. It is unlikely that ground water quality would be affected by CBM development in Montana. Ground water in shallow aquifers has water quality that is similar to CBM water. CBM discharges would not reach deeper aquifers.

### ***B. TMDL Process***

#### **1. Description**

Section 303(d) of the federal Clean Water Act and the Montana Water Quality Act requires the state to develop Total Maximum Daily Loads (TMDL) for impaired surface water bodies--that is, water bodies that do not meet water quality standards. A TMDL is the amount of a pollutant that a water body can assimilate from all sources and still meet standards. TMDLs are designed to restore water quality in streams that have been impaired by either point or nonpoint sources.

A court order issued on June 21, 2000, prohibits DEQ from issuing Montana Pollutant Discharge Elimination System (MPDES) permits for new or increased discharges until the necessary TMDLs are developed. The Tongue and Powder Rivers and Rosebud Creek were designated as impaired on Montana's 1996 list of impaired water, which is called a "303(d) list". These rivers and streams were subsequently removed from the state's 303(d) list due to a lack of sufficient, credible data to support their listing. TMDL status reports for all three drainages have been published for public review and comment. The status reports indicate that there is not enough information available to determine whether these streams are impaired. A final determination on the stream's status of impairment or non-impairment is expected to be finalized in the winter of 2003/2004.

#### **2. Effect on Standards**

Development of TMDLs will assist in ensuring that water quality standards are met. Waste load allocations developed during the TMDL process will be placed in discharge permits. Implementation of TMDLs is not mandatory for non-point source discharges, but the TMDL process includes a process for voluntary load reductions by non-point sources so that water quality standards are achieved.

## ***C. Regulatory Mechanisms***

### **1. Permits or Authorizations**

#### **a. Streams**

The discharge of a pollutant to a state surface water requires a MPDES permit from DEQ. Through issuance of the MPDES permit, DEQ must require compliance with state water quality standards, including nondegradation requirements, and require monitoring to ensure compliance.

On August 23, 2002, U.S. District Judge Sam E. Haddon ruled that unaltered ground water discharged as a result of coal bed methane development is not a “pollutant” as that term is defined in the federal Clean Water Act (CWA). Since the court found that unaltered ground water is not a pollutant under the CWA, the court went on to hold that discharges from coal bed methane development do not require permits under the federal NPDES permit program (*Northern Plains Resource Council v. Fidelity Exploration and Development*, CV 00-105-BLG-SHE, District of Montana, Billings Division). In its ruling, the court explained that its holding applied with equal force to Montana’s MPDES permit requirements.

This decision was appealed to the Court of Appeals for the Ninth Circuit. On April 10, 2003, the Court of Appeals reversed the District Court by holding that CBM discharges are or contain pollutants and that a discharge permit is therefore required. The defendants have petitioned for review by the United States Supreme Court.

Effective June 27, 2003, the water quality rules will require that, before discharging CBM water to state surface waters, a person must apply for and obtain a DEQ determination of whether the proposed discharge is nonsignificant under non-degradation significance criteria contained in the water quality rules. The rule authorizes DEQ to impose limits or conditions on discharges of coal bed methane to ensure that all water quality standards, including Montana’s non-degradation requirements, will be met. The rule further provides that the DEQ nonsignificance determination is not required if the person has applied for an MPDES permit for the discharge.

In addition, construction activities associated with the CBM development that disturb one acre or more of land are subject to DEQ’s general stormwater permit requirements. Developers proposing to disturb one acre or more must notify DEQ of their intent to obtain coverage under the general permit and submit a storm water pollution prevention plan.

#### **b. Ponds**

##### **(i) General Discharge Permit**

As long as the decision of the 9<sup>th</sup> Circuit Court of Appeals is effective, a CBM Produced Water General Discharge Permit, issued through the MPDES program will be required for discharges of produced water from a constructed impoundment that is not located in ephemeral, intermittent, or perennial drainages, or the alluvial deposits underlying floodplains and terraces of these drainages. Impoundments must be sized to contain a normal volume of water plus a 25-year, 24-

hour precipitation event. Limits are prescribed for effluent, and the quality of the impounded water must be monitored.

## **(ii) Individual Discharge Permits/Significance Determinations**

For discharges from impoundments located in drainages, individual permits or significance determinations must be obtained as is required for direct discharges to streams. See section II.C.1.a.

### **c. Ground water**

Discharges into state ground waters of water associated with produced water pits used in oil and gas field operations, and regulated pursuant to Title 82, Chapter 11, MCA, are not subject to ground water permit requirements (75-5-401(5)(e), MCA). Therefore, no permit is required for impounded produced water that infiltrates into ground water. It is unlikely that ground water quality would be affected by CBM development in Montana.

Injection wells that might affect ground water are regulated by EPA, under the federal Safe Drinking Water Act, or by MBOGC under state law, depending on the class of well.

Class II injection wells are used for disposal of fluids, including water, brought to the surface during oil and gas production operations. These wells are regulated by MBOGC under its Underground Injection Control program. Injection wells may not degrade ground water; that is, they may not lower the quality of the ground water significantly. Nonsignificant changes in water quality, according to criteria in ARM 17.30.715, may be allowed.

## **2. Monitoring**

Individual MPDES permits require the operator to monitor discharge quality and quantity. The specific water quality parameters that must be monitored, and the frequency of monitoring and reporting, vary with the particular circumstance, such as the quality of the discharge and the quality of the receiving water.

The produced water general discharge permit will contain standard monitoring requirements that are the same for each permit. The quality of the impounded water and the quality of any discharges from an impoundment must be monitored by the operator and reported to DEQ. Permits and authorizations will contain monitoring and reporting requirements sufficient to allow DEQ to determine whether effluent limits in permits and authorizations are being met and, if not, ensure compliance through enforcement processes.

In addition, DEQ will continue to cooperate with BLM and the U.S. Geological Survey in maintaining and operating monitoring and gauging stations on the major streams in the Powder River Basin. Standard measurements will include, but will not be limited to, flow volume, pH, EC, water temperature, and common ions (e.g., sodium, magnesium, calcium, potassium, carbonate, chloride, and sulfate).

### **3. 401 Certification Process**

Any person conducting an activity that requires a federal permit or license and that may result in a discharge to state waters must obtain certification that the discharge complies with state water quality standards. The federal Clean Water Act, 33 U.S.C. 1341, requires certification by the state. If an MPDES permit is required for the proposed activity, DEQ may waive certification pursuant to A.R.M. 17.30.105.

### **4. Interagency Cooperation**

DEQ will participate in an inter-agency working group for water quality protection in the Powder River Basin. Participating in the working group will be the Montana and Wyoming BLM offices, the Wyoming DEQ, the Montana Board of Oil and Gas Conservation, the Montana Department of Natural Resources and Conservation, and the EPA. DEQ will also invite the participation of the BIA, National Park Service, the U.S. Forest Service, and the Northern Cheyenne and Crow Tribes. The general purpose of this working group is to ensure that adequate monitoring is conducted and that, if necessary, adequate mitigation measures are developed and implemented to ensure compliance with water quality standards.

The tasks that will be performed by the Water Quality working group include: (1) development of surface water and ground water monitoring plans for each watershed and aquifer; (2) evaluation of ground water fate and transport; (3) establishment of baseline water quality information in order to predict future water quality for DEQ permitting actions and effects of BLM actions; (4) continuation of the work under the Total Maximum Daily Loads program to determine whether the Tongue and Powder Rivers are impaired; and (5) definition of a process that will determine the available assimilative capacity in each watershed and how that available assimilative capacity will be allocated between the States and Tribes.

## **III. Air Quality**

Pursuant to the Clean Air Act of Montana (Title 75, Chapter 2, MCA), the Montana Board of Environmental Review (BER) establishes, and DEQ enforces, the Montana Ambient Air Quality Standards (MAAQS) on all lands outside the exterior boundaries of Indian reservations. DEQ also enforces National Ambient Air Quality Standards (NAAQS) in Montana with oversight by the Environmental Protection Agency.

### ***A. Standards***

Ambient air quality standards limit the amount of criteria pollutants that can be emitted in outdoor areas that are generally accessible to the public. The Prevention of Significant Deterioration (PSD) portion of the new source review program limits the amount of change in air quality in areas with particularly high air quality, such as wilderness areas, by assigning and enforcing Class I increments. The PSD program also contains increments for Class II areas,

which provides for protection of air quality in areas that already have some deterioration of air quality.

### 1. Ambient Air Quality Standards/Prevention of Significant Deterioration

The BER has adopted rules setting ambient air quality standards for the criteria pollutants carbon monoxide (CO), lead (Pb), nitrogen oxides expressed as nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter less than 10 microns in diameter (PM<sub>10</sub>), and sulfur dioxide (SO<sub>2</sub>) and setting PSD increments for NO<sub>2</sub>, PM<sub>10</sub>, and SO<sub>2</sub>. DEQ is charged with enforcing these standards.

Pollutant	Averaging Time	MAAQS (µg/m <sup>3</sup> )	NAAQS (µg/m <sup>3</sup> )	PSD Class I Increment (ug/m3)	PSD Class II Increments (ug/m3)
CO	1 hour	26,450	40,000	-	
	8 hours	10,350	10,000	-	
Pb	Quarterly	1.5	1.5	-	
NO <sub>2</sub>	1 hour	564	-	-	
	Annual	94	100	2.5	25
O <sub>3</sub>	1 hour	196	235	-	
	8 hours	-	157	-	
PM <sub>10</sub>	24 hours	150	150	8	30
	Annual	50	50	4	17
SO <sub>2</sub>	1 hour	1,300	-	-	
	3 hours	-	1,300	25	512
	24 hours	262	365	5	91
	Annual	52	80	2	20

### 2. Air Quality Related Values

Air Quality Related Values (AQRV) are guidelines used by federal land management agencies to help protect air quality in sensitive areas, such as national parks and wilderness areas. Montana does not have standards for AQRVs but considers them during permitting when sensitive areas might be affected. The main AQRVs potentially affected by CBM development are visibility and acid deposition.

#### a. Visibility

Regional haze is caused by fine particles and gases in the atmosphere scattering and absorbing light. The particles and gases are derived from natural sources, such as forest fires, and man-made sources, such as compressor engines. Generally, more than a 10 percent decrease in visibility in Class I areas due to an emission source is considered unacceptable to federal land managers.



## **b. Acid Deposition**

Sulfur and nitrogen from emission sources can combine with atmospheric moisture to produce acid. When this acidified moisture condenses to form rain or snow, the acid is deposited on the ground. The U.S. Forest Service has developed thresholds for sulfur and nitrogen deposition below which acid deposition should not adversely affect sensitive lakes. The Forest Service also uses the acid neutralizing capacity of lake water as a screening criterion for assessing acid deposition damage to sensitive lakes.

## ***B. Regulatory Mechanisms***

DEQ regulates the construction, installation, operation and modification of equipment or facilities that may directly or indirectly cause or contribute to air pollution or a violation of the MAAQS or NAAQS. Minor source permitting is required for sources with the potential to emit more than 25 tons of any regulated pollutant per year. Major source permitting is required for listed sources with the potential to emit 100 tons or more per year of any criteria pollutant or for non-listed sources with the potential to emit 250 or more tons per year of any criteria pollutant.

### **1. Permits**

#### **a. Compressor Engine Emissions**

Natural gas-fired field compressors, serving groups of wells, are generally permitted as minor sources. Best Available Control Technology (BACT) emission limits are established at the time of permit issuance and are established on a case-by-case basis. Generally, NO<sub>2</sub> has been limited to about 2 grams per brake horsepower hour (g/bhp-hr), CO is limited to 3 g/bhp-hr, and volatile organic compounds are limited to 1 g/bhp-hr. However, the application of BACT to the CBM industry may result in different limits.

The larger sales compressors, serving several field compressors, will likely be permitted as major sources. DEQ received the first large sales compressor station permit application on May 9, 2003, and this permit was subsequently issued on July 16, 2003. BACT emission limits will be established for each compressor on a case-by-case basis.

#### **b. Fugitive Dust**

By administrative rule and, typically, by permit, reasonable precautions must be taken to control fugitive dust. Generally, opacity of emissions of airborne particulate matter is limited to less than 20%. Operators are required to keep fresh water and/or chemical dust suppressant available for the purpose of controlling fugitive dust.

## **2. Enforcement of Standards**

### **a. Ambient Air Quality Standards**

The Final EIS estimated that the NAAQS might be exceeded under the preferred alternative, without mitigation. These impacts would not be permitted to occur, due to mitigation through the construction permit process, because appropriate limitations will be established through the permitting process to ensure compliance with all applicable standards, increments, and other rules. These limitations will be enforced by the Department.

For fugitive emission sources not requiring a permit ("non-permitted sources"), DEQ requires that reasonable precautions be taken to control fugitive emissions (ARM 17.8.308). This limit is applicable to all sources (permitted and non-permitted) statewide. DEQ would enforce these requirements consistently throughout the CBM development area.

### **b. Prevention of Significant Deterioration**

A monitoring site in the Powder River Basin may be necessary to establish whether future air quality impacts trend toward exceeding PSD increments. Requirements for permitted sources would protect against exceeding PSD Class I increments. Further, existing DEQ administrative rules would protect against impacts from non-permitted sources.

### **c. Air Quality Related Values**

Permitted sources would be required to demonstrate compliance with applicable standards through the permitting process. Any permit issued would have to maintain visibility and acid deposition AQRVs. Any non-permitted source would be subject to existing Montana administrative rules, and enforcement would be implemented throughout the CBM development area.

## **3. Monitoring**

Air quality permits contain monitoring and reporting requirements. Operators must monitor the emission output of the permitted sources and report the results to DEQ. This information is used for the annual emission inventory and to verify permit compliance.

In addition, at least one regional-scale ambient monitoring station will be established and maintained. DEQ will participate in an interagency working group to determine the appropriate location. The Birney/Ashland area is a likely location. Criteria pollutants that will be monitored are NO<sub>x</sub>, O<sub>3</sub>, and PM<sub>10</sub>. Data gathered by the monitoring program will be used to model cumulative impacts.

Should future modeling, using ambient monitoring data, indicate potential standards violations or increment consumption, DEQ will require more stringent permit limits to protect air quality.

#### **4. Interagency Cooperation**

DEQ will participate in an interagency working group for air quality protection in the Powder River Basin. Also participating in the working group will be the Montana and Wyoming BLM offices, the Wyoming DEQ, the Montana Board of Oil and Gas Conservation, the Montana Department of Natural Resources and Conservation, and the EPA. DEQ will also invite the participation of the BIA, National Park Service, the U.S. Forest Service, and the Northern Cheyenne and Crow Tribes. The general purpose of this working group is to ensure that adequate monitoring is conducted and that, if necessary, adequate mitigation measures are developed and implemented to ensure compliance with air quality standards.

The tasks that will be performed by the Air Quality working group include: (1) assessment of the existing monitoring and establishment of thresholds or triggers and associated response actions; (2) establishment of the baseline data that will be used for the PSD increment analysis and analysis of Air Quality Related Values; (3) development of a strategy for addressing cumulative impacts in Class I and Class II areas; (4) identification of existing models in use and development of a protocol for their use; and (5) continuation of the ongoing assessment of BACT for both states.

### **IV. MEPA Compliance**

The EIS and this ROD have been prepared in response to the potential need for air and water permitting in association with future CBM development in Montana and to address issues and concerns identified in public comments. The issues and alternatives are summarized below and presented in detail in the Draft and Final EISs. The preferred alternative identified in the EIS was Alternative E.

#### ***A. Public Involvement***

##### **1. Scoping**

Public scoping meetings were held in Ashland, Billings, Broadus, Miles City, and Helena in January 2001. Comments covered a range of issues, but only those related to air and water quality and permitting fall within DEQ's authority.

##### **2. Public Review**

The Draft EIS was published on February 15, 2002, followed by a 90-day public review period. About 1,500 copies were distributed to the public and other federal and state agencies for comment. The Draft EIS was also posted on DEQ's web site. The Draft EIS analyzed five alternatives, including the no action alternative and the agencies' preferred alternative (Alternative E).

The agencies received more than 8,800 e-mails, faxes, letters, cards, and oral statements on the Draft EIS during the public comment period, which ran through May 15, 2002. Public hearings

were held in Billings, Bozeman, Broadus, Crow Agency, Lame Deer, and Helena in April 2002 to receive oral comments on the Draft EIS. These hearings were also a forum for DEQ to collect public comments on the proposed CBM Produced Water General Discharge Permit (CBMPW-GDP Permit No.: MT-G390000).

All comments on the Draft EIS were reviewed and considered. Comments that presented new data, questioned facts or analysis, or raised questions or issues bearing directly upon the alternatives or environmental analysis received a response in Chapter 5 of the Final EIS. Comments expressing personal opinions were considered, but no response was prepared.

## ***B. Issues***

Chapter 1 of the EIS describes the issues raised by agency specialists and the public. Although other issues were raised regarding CBM development in general, DEQ's regulatory authority only covers air quality and water quality issues.

### **1. Air Quality**

Potential changes in ambient air quality from CBM activities, such as reduced visibility, compressor engine emissions, fugitive dust, harmful gases, and changes in climate, constituted the majority of issues related to this resource.

### **2. Water Quality**

Water quality issues included inspection, treatment, storage, and conveyance of produced water and short- and long-term effects on surface water quality.

## ***C. Alternatives***

### **1. Alternatives Considered in Detail**

The following five management alternatives were considered in the development of the plan. Each alternative was described and analyzed in the Draft and Final EISs.

Alternative A, the "no action" alternative, describes and analyzes current management of CBM activities.

Alternative B would restrict CBM development and emphasize protection of soil, water, air, vegetation, wildlife, and cultural resources.

Alternative C would emphasize development of CBM.

Alternative D would encourage CBM exploration and development, while maintaining existing land uses.

Alternative E would encourage CBM development, while maintaining or protecting soil, water, air, vegetation, wildlife and cultural resources.

## **2. Preferred Alternative**

The agencies selected Alternative E as the preferred alternative. The decision took into account the impacts of the alternatives, as well as public comment and the potential for Alternative E to resolve issues.

## **3. Environmentally Preferred Alternative**

Alternative A, No Action, is the environmentally preferred alternative. Implementation of Alternative A would result in the least impact on natural resources, including air quality and water quality.

### ***D. Decision***

After considering the proposal, issues, alternatives, potential impacts, and management constraints, the BLM and the Montana Board of Oil and Gas Conservation selected Alternative E for implementation. DEQ's authority to select among alternatives is more limited than the authority of the BLM and Montana Board of Oil and Gas Conservation. The Department's authority is to ensure compliance with air and water quality standards through its permitting, compliance assurance, and enforcement programs. DEQ concurs in the selection of Alternative E, the Preferred Alternative, for implementation insofar as DEQ's statutory authority extends over air and water permitting as described in this ROD.

Mitigation measures to reduce environmental impacts of CBM development have been developed through DEQ's statutory authority under the Water Quality Act and the Clean Air Act. DEQ may impose these measures as permit conditions depending on site-specific circumstances. Implementation of Alternative E by BLM and the Montana Board of Oil and Gas Conservation will comply with air and water quality requirements imposed by DEQ.

DEQ's decision to concur in BLM's and the Montana Board of Oil and Gas Conservation's decision does not authorize the emission of any pollutant to air. Before any regulated emission may occur, a permit must be obtained. Through the permitting process, DEQ will ensure that all air quality requirements are met. DEQ will also conduct analysis under MEPA to ensure that potential impacts are analyzed and disclosed.

DEQ's decision to concur in BLM's and the Montana Board of Oil and Gas Conservation's decision does not authorize the emission of any pollutant to water. DEQ will ensure that all water quality requirements are met through the permitting or significance determination process. DEQ will also conduct analysis under MEPA to ensure that potential impacts are analyzed and disclosed.

## ***E. Rationale for the Decision***

### **1. Rationale for the Selected Alternative**

DEQ has decided to concur in the selection of Alternative E because air and water quality regulatory requirements will be met.

### **2. Compliance with Legal Mandates**

#### **a. Clean Air Act**

Requirements of the Clean Air Act of Montana will be met through compliance with new air quality permits for all compressor stations and other stationary sources. This includes abiding by requirements of the State Implementation Plan.

DEQ has reviewed the proposed activities and determined that the emissions associated with these projects would not trigger any additional air quality permitting requirements for the types of facilities associated with CBM development. The current DEQ air permitting process includes analyses of equipment emissions and associated ambient impacts. Permits would not be issued if emissions would exceed the MAAQS or NAAQS.

#### **b. Montana Water Quality Act**

The Board of Environmental Review has adopted numeric standards for EC and SAR in rivers and streams in the Powder River Basin. Requirements of the Water Quality Act will be met through permitting under the MPDES programs or the significance determination process. Effluent limits in the discharge permits or significance determinations will be set so that the water quality standards for the receiving waters will not be exceeded and existing and potential uses of the waters will be protected.

#### **c. MEPA Cumulative Effects Assessment**

Chapter 4 of the Final EIS estimates cumulative effects based on the reasonably foreseeable development projections of CBM in Montana. Cumulative effects of future projects will be evaluated before air and water quality permits are issued.

#### **d. Private Property Assessment Act**

The effects of permit conditions on private property rights will be assessed at the time real permitting actions are considered.

Dated this 7th day of August, 2003.

/s/ JAN P. SENSIBAUGH  
Jan P. Sensibaugh, Director