#### ORDINANCE #1

## AN ORDINANCE FOR PROTECTION OF WATER AND SOIL FROM COAL BED METHANE PRODUCED WATER IN ROSEBUD CONSERVATION DISTRICT

#### Section 1. Intent—policy, purpose and findings.

- (1) It is the declared policy of this state, in Section 76-15-102, Montana Code Annotated, to provide for the conservation of soil and soil resources of this state, for the control and prevention of soil erosion, for the prevention of floodwater and sediment damages, and for furthering the conservation, development, utilization, and disposal of water and thereby to preserve natural resources, control floods, prevent impairment of dams and reservoirs, preserve wildlife, protect the tax base, protect public lands, and protect and promote the health, safety, and general welfare of the people of this state. The Montana legislature, in Section 76-15-702, Montana Code Annotated, has delegated the authority to formulate regulations governing the use of lands within conservation district boundaries in the interest of conserving soil and water resources and preventing and controlling erosion.
- (2) It is the policy of the Rosebud Conservation District to prevent soil erosion from Coal Bed Methane Produced Water Impoundments during runoff events, prevent the creation of saline seeps, prevent the wasting of our water resource, prevent the contamination of shallow ground water and raising of water tables that will create such saline seeps, and ensure the reclamation of such impoundments so as not to create salt flats etc.
- (3) The Rosebud Conservation District finds that utilization of stock tanks will minimize impacts of water discharged from coal seams.
- (4) Coal bed methane produced water is industrial waste and constitutes a discharge of pollutants within the meaning of the Federal Clean Water Act. Coal Bed Methane Produced Water Impoundments will contaminate nearby soils with salts and metals.
- (5) Coal Bed Methane Produced Water Impoundments constructed in intermittent or ephemeral drainages capture natural surface runoff and thereby interfere with the vested water rights of downstream users and otherwise alter the natural hydrologic regime of the watershed.
- (6) Coal Bed Methane Produced Water Impoundments pollute natural surface runoff and thereby degrade surface water quality.
- (7) Coal Bed Methane Produced Water Impoundments constructed in intermittent or ephemeral drainages may overflow during precipitation events and discharge methane produced water into such drainages. Such overflow events increase erosion and increase sedimentation of downstream surface waters. Such overflow events discharge pollutants into such drainages that contaminate natural runoff in subsequent precipitation events.

- (8) The Montana Constitution requires the reclamation of all lands disturbed by the taking of natural resources and we have an obligation to satisfy this constitutional mandate. Recognizing our obligation under the Constitution, the District enacts this ordinance to take a pro-active approach to protecting the soil and water resources of the District.
- (9) It is not the intent of this land use ordinance to preclude other water management plans that may be a better practice for the protection of the soil and water in Rosebud Conservation District. It is not the intent of the Rosebud Conservation District to stop coal bed methane development in our district by enacting this ordinance but to provide a protective measure to our soils and water and to encourage a method of coal bed methane extraction that allows for the permanent and beneficial use of all our natural resources.

# **Section 2. Definitions.** For the purposes of this ordinance the following terms are defined as follows:

- (1) "Coal Bed Methane Produced Water Impoundment" means any impoundment into which water produced from coal bed methane operations is discharged.
- (2) "Coal Bed Methane Operation(s)" means production of gas from coal seams for profit or commercial sale.
- (3) "Coal Bed Methane Conservation Plan" shall include but is not limited to the following sections, 4 through 7.
- (4) "Operator" means the person that plans to produce or has produced gas from a Coal Bed Methane Operation.
- (5) "Water Management Plan" means the plan required by the Montana Department of Environmental Quality, Montana Board of Oil and Gas Conservation, and United States Bureau of Land Management Records of Decisions.
- (6) "Ephemeral Stream" means a stream or part of a stream, which flows only in direct response to precipitation in the immediate watershed or in response to the melting of snow and ice. The channel bottom is always above the local water table.
- (7) "Intermittent Stream" means a stream or reach of stream that is below the local water table for a least some part of the year and obtains its flow from both surface run-off and groundwater discharge.
- (8) "Reclamation Plan" means a plan to reclaim all areas disturbed by the impoundment. A Reclamation Plan must describe in detail how the conditions of Section 9 will be met.
- (9) "Reclamation Bond" means a reclamation bond payable to the District for an amount sufficient to reclaim the land.

Section 3. In-Channel Coal Bed Methane Produced Water Impoundments Prohibited. Coal Bed Methane Produced Water Impoundments constructed in intermittent or ephemeral drainages are prohibited.

<u>Section 4. Land Application of Coal Bed Methane Produced Water.</u> The following requirements for land application of coal bed methane produced water in Rosebud Conservation District are in effect:

- (1)Surface run-off from land applied coal bed methane produced water is prohibited.
- (2) Surface owner consent for land application is needed in writing, stating the location of the field to be irrigated.
- (3) Irrigation and land application require a Conservation Plan through the Rosebud Conservation District for the specific area of use.
- (4) No accumulation of sodium salts derived from coal bed methane produced water or consequential to discharges of coal bed methane produced water or soluble salts consequential to amendments applied to alter the consequences of disposal, dispersal, spreading, or seepage of coal bed methane produced water in or on the soils in these areas are allowed.
- (5) Monitoring will include wells in the down gradient alluvium. Gypsum blocks or suitable method to measure soil moisture is required. Soil samples will be collected to establish baseline soil characteristics, particularly relative to soluble salts and exchangeable sodium before any coal bed methane water is applied and then annually at the end of the application period. Water quality and quantity shall be recorded by the Operator and entered annually into the Conservation Plan.
- (6) Land application or irrigation is a beneficial use of coal bed methane water and is not to be water wasting or disposal of coal bed methane water in Rosebud Conservation District's soil.
- (7) Items in Section 4 are minimum standards. The best available technology will be encouraged.

<u>Section 5. Coal Bed Methane Produced Water Impoundments.</u> Coal Bed Methane Produced Water Impoundments are allowed if all the following criteria are met:

(1) The impoundment shall not be constructed in intermittent or ephemeral drainages or alluvial aquifers.

- (2) The Operator shall file with the District a Reclamation Bond payable to the District for an amount sufficient to reclaim the land disturbed by the impoundment. This amount will be established by bid from at least two contractors that do reclamation work. If the Conservation District determines that the bonding level does not represent the present cost of reclaiming the disturbed land according to the reclamation requirements specified in the Ordinance or Coal Bed Methane Conservation Plan the Conservation District shall notify the Operator and the Operator will modify the bond to accurately reflect the present cost of the reclamation.
- (3) The Operator shall verify that the surface owner has consented in writing to the placement and construction of the impoundment.
- (4) The Operator shall perform a beneficial use assessment to estimate how much water will need to be held in impoundments. The assessment shall include livestock watered, wildlife density, and how many acres will be irrigated.
- (5) The Operator shall verify that the surface owner has obtained a beneficial use permit from the Department of Natural Resources and Conservation pursuant to MCA §85-2-301 et seq.
- (6) The Operator shall provide written documentation that the impoundment is covered by a Montana Pollution Discharge Elimination System Permit.
- (7) The Operator shall obtain approval from the Conservation District for its Coal Bed Methane Conservation Plan.

<u>Section 6. Construction and Operation of Impoundments.</u> The Operator shall not commence construction of an impoundment until the District has approved the Coal Bed Methane Conservation Plan and certified that the Operator has met the requirements of Section 5. It is the Operator's responsibility to maintain the impoundment so that it is used for its intended purpose.

### Section 7. Application for Conservation Plan

- (1) The Operator shall submit an application with the District.
- (2) The application shall include the following information:
  - (a) A cover letter identifying the Water Management Plan and watershed affected by the project.
  - (b) A 7.5-minute topographic map showing the location of the proposed impoundment and other Coal Bed Methane Produced Water Impoundments in the watershed. The map must identify all surface waters and springs within the watershed.

- (c) A groundwater report showing the location of monitoring wells, depth to water table, and baseline ground water levels and quality for ground water within 200 vertical feet of the impoundment.
- (d) A soil survey and map for all areas disturbed by the impoundment. The survey shall include a detailed description of the soil types present and analysis of soil texture, EC, SAR, and other chemical constituents.
- (e) Impoundments must be engineered to withstand a 24 hour/100 year rain event. These impoundments must be lined to prevent the accumulation of soluble salts and exchangeable sodium in the soils of Rosebud Conservation District.
- (f) A report documenting the volume and quality of the produced water being discharged to the impoundment. This must be reported annually to the Conservation District.
- (g) A Reclamation Plan for the impoundment describing in detail how the impoundment will be reclaimed to its original condition.
- (h) A surface water and ground water monitoring plan for the watershed in which the impoundment is located. The monitoring plan shall satisfy the following minimum requirements:
- (1) Established ground water monitoring wells down gradient of the impoundment. Monitoring of ground water levels and quality shall be conducted monthly.
- (2) Established surface water monitoring stations for any surface waters located within three miles downstream of the impoundment. Monitoring of surface water quality shall be conducted quarterly.
- (3) An Operator may consolidate multiple impoundments in the same watershed into a joint application.
- (4) The Operator shall pay a \$4500 application fee per Coal Bed Methane Conservation Plan application to the District.
- (5) The District shall notify the Operator that application is complete or that additional information is needed within 60-days of receipt of the application.
- (6) The Operator shall have 60-days to provide additional information if the District determines the application is incomplete.

### Section 8. Approval of Application.

(1) Upon receipt of a complete application, the District shall publish notice of the application in a newspaper of general circulation for Rosebud County and comply with the notice requirements of other laws.

(2) The District shall conduct a hearing on the proposed application and solicit public comment. The District shall grant or deny the application within 120 days of the hearing. The District cannot approve the application unless all the requirements of this ordinance have been satisfied. The term of the Coal Bed Methane Conservation Plan will be five years at which time it will be reevaluated.

### Section 9. Closure and Reclamation of Impoundments.

- (1) Using the best available technology, the Operator shall commence the reclamation of the land disturbed by the impoundment within 30 days of the plugging of the last methane well discharging to the impoundment.
- (2) The District shall release the bond when all of the following conditions have been satisfied:
  - (a) The impoundment has been backfilled, graded, and top-soiled to the original contours of the land to the maximum extent possible.
  - (b) A diverse, effective, and permanent native vegetative cover has been established that is capable of self-generation and plant succession at least equal in extent of cover to the natural vegetation of the area.
  - (c) The vegetative cover must be capable of feeding and sustaining grazing pressure from a quantity and mixture of wildlife and livestock at least comparable to that which the land could have sustained prior to the impoundment; regenerating under natural conditions prevailing at the site; and preventing soil erosion to the extent achieved prior to the impoundment.
- (3) The Operator may apply for release of the performance bond.
- (4) The District shall inspect and evaluate reclamation efforts as soon as possible following an application for bond release. If the District determines that the conditions of this subsection have been satisfied, the District shall release the bond.
- (5) If the Operator forfeits the bond, the District shall reclaim the impoundments consistent with objectives of this subsection.
- <u>Section 10. Board of Adjustments.</u> The district shall establish a board of adjustments as provided for in MCA Section 76-15-721 to Section 76-15-722.
- <u>Section 11. Petition for a Variance</u> Any qualified elector may file a petition for a variance from this ordinance with the board of adjustment as provided for in MCA Section 76-15-723 to Section 76-15-724.
- <u>Section 12. Order to Cease and Desist Operations</u> The supervisors shall have the authority to initiate a court order to cease and desist against any person who proceeds without the Coal Bed Methane Conservation Plan and Reclamation Bond as stated in this ordinance.

<u>Section 13. Compliance With Other Laws</u> Approval for any land disturbance does not relieve, impair, diminish, divest, or control any existing laws of the State of Montana or the United States.

<u>Section 14. Liability</u> Neither the approval of a plan or any other action of the District or the supervisors under the provision of this ordinance, nor the compliance with the provisions of this ordinance shall relieve any person from the responsibility for damage to any person or property otherwise imposed by law, nor impose any liability upon the district or the supervisors for damage to any person or property.

<u>Section 15. Severability Clause</u> If any section, clause, or portion of this ordinance shall be held by a court of competent jurisdiction to be invalid or unconstitutional, such finding shall not affect any other section, clause, or portion of this ordinance.

