CBM Produced Water Working Group
Recommendations
Updated 05/19/10

Introduction. The CBM Produced Water Working Group recommends that DEQ incorporate the following provisions into its WYPDES permit program for CBM produced water discharges in the Powder River Basin.

Permitting Basis

A. Permits shall protect historically existing (pre-CBM) indigenous plant or crop communities. Such communities shall remain capable of survival and maintenance under the conditions of increased soil moisture, salinity, and alkalinity from CBM discharge.

B. Permits shall be based on drainage-specific factors, such as soils, water quality, crop species, irrigation, channel capacity, multiple operators, flow conditions, topography and water table factors.

C. Permits shall be based on vetted, credentialed science, be preventative not reactive and include meaningful and timely enforcement. Permits should prevent harm to lands and require the permittee to demonstrate compliance.

D. If the quantity of the water is causing unacceptable water quality or has the potential to cause unacceptable water quality, then the EQA gives DEQ the authority to regulate water quantity. (AG Formal Opinion No. 2006-001)

E. Within each drainage, where no economically feasible technical solutions exist to prevent salt loading and flooding problems, the permit shall require a water management or irrigation plan jointly developed by landowners and the permittee.

Definitions

A. Define what constitutes a measurable decrease in crop or livestock production due to CBM discharged water. (This would involve development of the metrics and methodology for measuring whether or not such a decrease has occurred or would be likely to occur due to CBM discharged water.)

Monitoring

A. Require baseline measurements of soil quality, plant communities, and shallow groundwater quality & depth before issuing a discharge permit. In the absence of baseline data on plants and soils due to CBM discharges, certification or documentation of baseline plant and soil inventories from landowners, aerial surveys, NRCS data, or other historical information should be used.

B. Require monitoring of surface water quality & flow and shallow groundwater quality & depth to ensure compliance with Chapter 1 – Section 20.

C. Require on-going monitoring of soils, crop yields, etc. at the point of use during the period of CBM discharge.