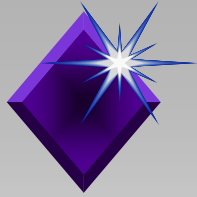


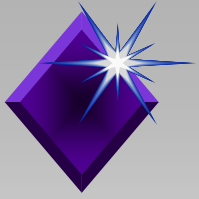


***Water Quality Regulations
in Colorado Relating to
Coal Bed Methane
Activities***



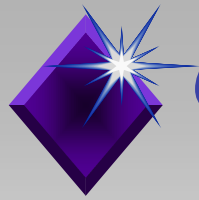
WATER QUALITY CONTROL DIVISION

- x The Division regulates discharges to “waters of the state” which include surface waters such as rivers, arroyos, gulches, ponds, lakes, etc.*
- x EPA has delegated the authority to implement the National Pollutant Discharge Elimination System permit program to the Division*



TYPES OF PERMITS

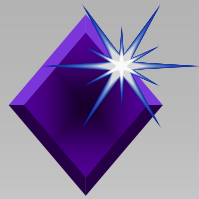
- x Permits – Individual and General*
 - x Certifications under the General permit are faster to get (30 days, where General Permit itself requires public notice)*
 - x Easier application*
 - x Lower permit fee*
 - x Generic - cover one or more industries*
 - x If an operation is unique, an individual permit may be required*



GENERAL PERMIT REQUIREMENTS

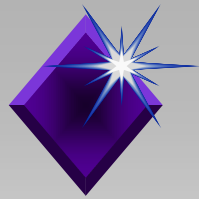
The Division has authority to develop a general permit for a category of point sources if the sources all:

- 1. involve the same or substantially similar types of operations;*
- 2. discharge the same types of wastes;*
- 3. require the same effluent limitations or operating conditions;*
- 4. require the same or similar monitoring; and*
- 5. in the opinion of the Division Director, are more appropriately controlled under a general permit than under individual permits.*



GENERAL PERMIT OPERATION

- x A General Permit is issued for a category of sources, such as CBM degasification*
- x Individual discharges that meet the criteria for coverage under the general permit are certified which authorizes the discharge*
- x Criteria include results of a water quality sample demonstrating that the proposed discharge meets all permit effluent limitations and passes a Whole Effluent Toxicity (WET) test*
- x Certification under the general permit can be completed in a matter of days*



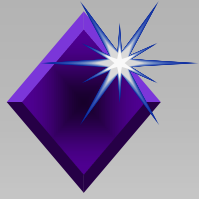
COALBED METHANE DEGASIFICATION GENERAL PERMITS

- x Permit goes to public notice for comment and includes numeric limits, sampling and reporting requirements that apply to all individual discharges*
- x The permit can be amended without public notice to activate/deactivate outfalls, reduce monitoring based on environmental risk, change the location of an outfall, and note any addition of wells to an outfall*



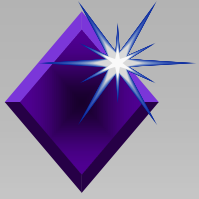
WHAT IS REQUIRED TO ADD AN OUTFALL TO AN EXISTING PERMIT?

- x Written notification is required to activate discharges from wells that have been pre-approved*
- x If approval has not been conveyed in writing by the Division within ten calendar days, such approval shall be deemed granted*
- x Discharges from wells that have not been pre-approved will receive a written certification within thirty calendar days of receipt of the permittee's request*



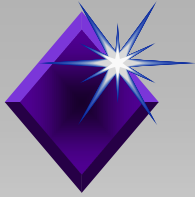
WATER QUALITY ASSESSMENT

- x Intended to determine the amount of a pollutant that can be discharged at a given flow*
- x For CBM, the watershed approach is taken*
- x The Regulations that apply are specific to the basin and stream segment to which the permittee discharges (including Salinity Regs)*
- x Water Quality Standards are set based on the classification and beneficial uses of the receiving stream*



STREAM CLASSIFICATION

- x *The Water Quality Control Commission classifies “segments” of streams based on four beneficial use classifications*
 - x *Aquatic Life*
 - x *Recreation*
 - x *Agriculture*
 - x *Water Supply*
- x *Segments may be designated for T&E species by the USFWS*



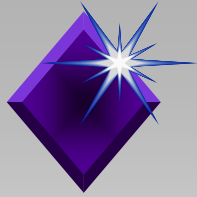
TYPICAL PARAMETERS

x The “typical” CBM permit contains limitations for the following parameters:

*x Flow, pH, TSS, Oil and Grease,
and Whole Effluent Toxicity*

x Other site-specific parameters may include:

*x TDS, Iron, manganese, selenium, boron,
chloride, copper, zinc, BTEX, other
organic pollutants*



ANNUAL PERMIT FEES FOR COAL DEGASIFICATION

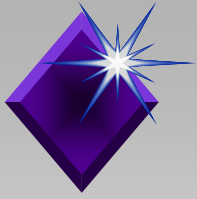
x <i>Flows between 0 and 49,999 gpd</i>	<i>\$1,533</i>
x <i>Flows between 50,000 and 99,999 gpd</i>	<i>\$2,346</i>
x <i>Flows 100,000 gpd and over</i>	<i>\$7,056</i>

(effective as of July 1, 2005)



PERMITTED DISCHARGERS INCLUDE

- x *CEDAR RIDGE (Huerfano County)*
- x *INFINITY (Routt County)*
- x *KOCH EXPLORATION (Moffat County)*
- x *PETROGLYPH (Huerfano County)*
- x *PETROGULF (Las Animas County)*
- x *PIONEER (Las Animas and Moffat County)*
- x *WINDSOR JEPSON (Routt County)*
- x *XTO ENERGY (Las Animas County)*



THE FUTURE

- x All discharge permits are considered for renewal every five years*
- x With this in mind, as more is learned about the CBM industry and the impact of the discharge of produced waters on state waters, we will adjust the requirements, if deemed necessary, based on protection of water quality*