



MESA COUNTY PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
MESA COUNTY, COLORADO

EVAPORATION POND FACILITIES/LAND FARMS
POLICIES

(A Component of the Energy Master Plan)

February 25, 2008

Revised Policy Adopted 27 September 2010
by the Mesa County Board of County Commissioners

Purpose

Mesa County shall require that exploration and production waste disposal facilities and other evaporation pond uses minimize or eliminate potential adverse impacts. These facilities are regulated as Conditional Use Permits in Mesa County, and these Policies provide guidance to the applicants, citizens and staff. These facilities, known herein as evaporation pond facilities (EPF's), shall be planned, located, designed and operated to facilitate compatibility with surrounding land uses in terms of, but not limited to, general use, scale, traffic, dust, noise, odor, and pollution. EPF's will be allowed for the purpose of disposing of produced water from gas or oil drilling operations. If drilling mud is accepted at the facility, it must be disposed of, treated, or re-used in compliance with applicable State and Federal regulations.

All proposed facilities will be reviewed by the appropriate regulatory agencies for compliance with state, local and federal regulations including: specifications in the Colorado Department of Public Health and Environment (CDPHE) **Section 17 Commercial Exploration & Production Waste Impoundments and the Colorado Oil and Gas Conservation Commission rules and regulations**. Conditional Use Permits for EPFs shall require applicants to obtain all applicable State, Local and Federal permits prior to construction and operation of the EPF.

I. Location:

- A. New EPF storage and treatment structures shall be located and operated in such a manner that no adverse impacts shall result off-site.
- B. In locating EPF storage and treatment facilities the following shall be considered at a minimum:
 - **Mandatory Setbacks required by the CDPHE¹**
 - distance from perennial, intermittent and ephemeral streams. Fluids from these facilities will not at any time neither contaminate such waters nor discharge without prior written permission from the applicable authorities.

¹ "17.3.1(B) **Mandatory Set-Backs:** For EP waste disposal facilities whose application for certificate of designation is submitted to the local governing authority after the effective date of this Section 17, the facility must have a mandatory set-back of one-half mile from all residences, educational facilities, day-care centers, hospitals, nursing homes, jails, hotels, motels, other occupied structures, or outside activity areas such as parks and playing fields."

- distance to a municipal boundary or any rural community (as delineated on the Mesa County Master Plan Future Land Use Map).
- distance from any existing dwellings (see footnote on page 1).
- best available technologies to mitigate odors, visibility and noise from the facility on adjacent and/or surrounding properties.
- size of the site

II. Site Analysis:

Baseline data collected in compliance with Section 17 of the CDPHE regulations prior to operations shall be submitted with the Site Plan application after a Conditional Use Permit for an EPF is approved.

III. Site Planning:

- A. The findings from analysis of the site characteristics must be incorporated into the site design and location of the evaporation ponds on the property.
- B. Adverse impacts due to wind speed and wind direction must be satisfactorily mitigated.
- C. The following Transportation Impact Study (TIS) is required:
 - 1) Where TIS requirements in the Road Access Policy (RAP) and the Evaporation Pond Facilities Policy differ, the more stringent requirement shall apply.
 - 2) A pre-study conference with the Road Access Policy Administrator and a Mesa County Development Engineer is mandatory.
 - 3) All proposed public road (not just publicly maintained) travel routes to the proposed site, from point(s) of origin or 5 miles, whichever is less shall be included in the TIS.
 - 4) In addition, a narrative statement shall be submitted by the project's traffic engineer that discusses the travel route anticipated to be taken by project traffic beyond the limits of the study area, including identification of any potential adverse impacts associated with the project traffic.
 - 5) When any proposed travel corridor includes streets or roads within the jurisdiction of other government agencies, Mesa County's TIS requirements shall be the minimum required and shall be included in the TIS submitted to Mesa County. Such other government agencies may have additional requirements that shall be adhered to.
 - 6) In addition to the RAP requirements, and at Mesa County's discretion, the applicant may be required to analyze segments of any public road travel route to determine its suitability for the proposed traffic generated by the evaporation pond facility. This requirement may include but is not limited to:
 - Pavement and subsurface investigation and load certification
 - Roadway structures investigation and load certification
 - Verification of design vehicle path and clearances
- D. Safety considerations shall be employed addressing the following at a minimum:
 - 1) Signs warning of potential drowning hazard
 - 2) Emergency escape routes and mechanisms such as ropes or ladders extending below the surface of the pond to allow a person to climb out of a pond in the event of an accident.
 - 3) Emergency contact information at the entrance to the facility and within the site.

- E. Odors and other emissions shall be contained on site and controlled in a manner to prevent nuisance levels from occurring off site.

IV. Bonding

The facility will be sufficiently bonded according to CDPHE or COGCC requirements at a minimum to insure that the reclamation plan, remediation plan and post closure water monitoring can be completed. Bonding estimates will be prepared by a professional engineer and submitted for review and approval by Mesa County, and the bond will be recalculated every 5 years. The bond will be sufficient to cover reclamation and, if needed, remediation of adverse environmental impacts. The bond will be required to adequately cover road maintenance costs and remediation of occurrences as well.

V. Operational Status

Mesa County shall be notified prior to any change of ownership/operator status at the facility and/or of any permit revisions or equipment upgrade/process change integral to the operation of the facility. If the EPF is sold to a different owner, that new owner assumes all the requirements of the permitted use.

VI. Closure and Reclamation

A. All EPF facilities and sites shall be reclaimed to the pre-development state. The facility will submit, as part of the Conditional Use Permit application, a closure plan approved by CDPHE and reclamation plan that will include but not be limited to the following:

1. Removal of the structures at the facility.
2. Removal and disposal of the remaining waste including sludge and contaminated soil and pond liner.
3. Re-grading the site to the approximate original contour.
4. Erosion control and revegetation of the disturbed area. Revegetation plans shall be approved by the Tri-River Extension Service.
5. A post-closure plan as required by CDPHE which includes future land use for the site.

B. After closure of the EPF the CUP must be amended to prohibit the EPF from operating as such a facility. Accordingly, prior to amending the CUP, a letter shall be submitted to Mesa County Planning and Economic Development Department certifying the State has approved the closure of the facility.

VII. Definitions

Produced water – the water (brine) brought up from the hydrocarbon bearing formation strata during the extraction of oil and gas, and can include formation water, injection water, and any chemicals added down hole or during the oil/water separation process. (Source: EPA)

Occurrence – Leak, spill, overflow, accident or other spill of a reportable quantity as defined by local, state and federal requirements and permits.

Evaporation pond – surface impoundment used for the purpose of containing, treating and evaporating produced water.

Evaporation Pond Facility – both private and commercial centralized facilities not including individual reserve pits at well locations.