NOTICE TO OPERATORS DRILLING WELLS WITHIN 3/4 MILE OF THE RIM OF THE ROAN PLATEAU IN GARFIELD COUNTY

PIT DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS

JUNE 12, 2008

This Notice to Operators (NTO) was developed in response to recent releases from pits proximate to the rim of the Roan Plateau in Garfield County. COGCC Staff understands that implementation of closed loop or semi-closed loop systems may result in: 1) greater land disturbance associated with pad construction (additional room for tanks) and pipeline construction (additional water pipelines for a consistent water supply), 2) the potential for spills associated with increased truck and heavy equipment traffic for handling drill cuttings and fluids, mechanical failures, and freezing of above-ground piping, and 3) other logistical problems related to observed water flows and containment requirements for emergency control of fluids. COGCC Staff believes that these factors justify the use of pits at the current time.

Notwithstanding the arguments presented above, COGCC Staff encourages continued infrastructure development and evaluation of closed loop and/or semi-closed loop systems by operators that minimize the storage of liquids on the rim, such that these systems may be considered in the future. Certain operators are well on their way towards development of processes that would allow for closed loop and/or semi-closed loop systems that would minimize the potential for spills and some of the logistical problems discussed above. COGCC Staff intends to work with operators to continue evaluating closed loop and/or semi-closed loop systems.

This NTO applies to locations within the Area of Concern shown on the attached figure. Pit requirements presented in this NTO apply to "short-term, multi-purpose pits." For the purpose of this NTO, a short-term, multi-purpose pit may be used as a flare pit, a blooey pit, a surface interval / well control pit, a cement returns pit, a reserve pit, and/or a flowback pit.

If an operator intends to convert a short-term, multi-purpose pit to a production (skim) pit, then the operator must submit a Form 15 (Earthen Pit Report/Permit). Production pits in the Area of Concern must comply with the requirements of this NTO. As discussed further under Item No. 9 of "Pit Design and Construction" below, the Director may require other additional protective measures for production pits as Conditions of Approval on Form 15.

Drill cuttings pits or bermed cuttings piles in the Area of Concern are not required to be constructed or monitored as discussed herein. However, moisture content

in the cuttings shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts in drill cuttings pits or bermed cuttings piles. At the time of closure, the cuttings must also meet the applicable standards of Table 910-1.

General Requirements

1. Pits used for exploration and production of oil and gas shall be constructed and operated to protect public health, safety, and welfare and the environment, including soil, waters of the state, and wildlife, from adverse impacts from E&P waste, except as permitted by applicable laws and regulations.
2. Pits shall not be constructed on known intermittent or perennial springs, seeps, or other surface water features. If groundwater is encountered during pit construction activity, pit construction shall cease and the location shall be reclaimed. An alternate location or an alternate plan (e.g., use of a closed loop and/or semi-closed loop system) must be approved by the Director before resuming operations.
3. Pits in the Area of Concern must be lined, as discussed below under “Pit Design and Construction.”
4. Pits shall be constructed, monitored, and operated to provide for a minimum of two (2) feet of freeboard at all times between the top of the pit liner at its point of lowest elevation and the fluid level of the pit. Pits shall be visually inspected, and the fluid level shall be monitored using a fixed pit-level indicator. Furthermore, operators shall maintain fluids in pits at the lowest practicable level, subject to the type of operation in process.
5. Any accumulation of oil in a pit shall be removed within twenty-four (24) hours of discovery. Operators shall use skimming, steam cleaning of exposed liners, or other safe and legal methods as necessary to maintain pits in clean condition, to control hydrocarbon odors, and to minimize potential impacts to the environment and wildlife. Only de minimis amounts of hydrocarbons may be present unless the pit is specifically permitted for oil or condensate recovery or disposal. The Director may require that the pit be closed if an operator repeatedly allows more than de minimis amounts of oil or condensate to accumulate in a pit. These requirements are not applicable to properly permitted, fenced, lined, and netted production pits.
6. Where necessary to protect public health, safety and welfare or to prevent adverse environmental impacts resulting from access to a pit by wildlife, migratory birds, domestic animals, or members of the general public, operators shall install appropriate netting or fencing and construct escape ramps.
7. Multi-well pits: production and special purpose pits used for treatment or disposal of E&P waste generated from more than one (1) well from one (1)

commonly owned or operated lease may be permitted in accordance with Rule 903. as a multi-well pit, subject to Director approval.

8. No portion of any pit shall be constructed on fill material, unless the pit and fill slope are designed and certified by a Professional Engineer, subject to review and approval by the Director prior to construction of the pit.
9. Produced water shall be treated in accordance with Rule 907. before being placed in a properly-permitted production pit.
10. Operators shall utilize bleach or other safe biocide treatments to control bacterial growth and related odors as needed.

Pit Design and Construction

1. Pits in the Area of Concern shall be designed to meet the minimum requirements contained in this NTO. If site-specific conditions do not allow for compliance with these minimum requirements, then the operator must submit a pit design which is certified by a Professional Engineer, subject to review and approval by the Director prior to construction of the pit.
2. A single synthetic liner shall be installed above bedding material (compacted soil or recycled drill cuttings which meet the applicable standard of Table 910-1 for sensitive areas). The bedding material shall have a minimum thickness of twelve (12) inches after compaction, shall cover the entire bottom and interior sides of the pit, and shall be constructed so that the hydraulic conductivity shall not exceed 1.0×10^{-7} cm/sec after testing and compaction. A representative number of tests shall be performed on the compacted bedding material on each sidewall and on the base of the pit. Compaction and permeability test results measured in the laboratory and field must be maintained by the operator for the life of the pit and provided to the Director upon request.
3. Alternatively, the foundation may be constructed with bedding material that exceeds a hydraulic conductivity of 1.0×10^{-7} cm/sec if a double synthetic liner system is used. The bedding material shall sufficiently cover all sharp rock edges and any other material protruding from the cut or fill which is capable of damaging the liners. The bedding material shall cover the entire bottom and interior sides of the pit and shall be overlain by a double synthetic liner. Both synthetic liners shall have a minimum thickness of twenty-four (24) mils. Bedding material shall have a minimum thickness of twelve (12) inches after compaction. Compaction and permeability testing for the bedding material is not required if a double synthetic liner system is used.
4. The synthetic liner(s) shall have a minimum thickness of twenty-four (24) mils and shall be of a high-density polyethylene, polypropylene, poly vinyl chloride, hypalon, or other synthetic material that is impervious, weather resistant and resistant to deterioration when in contact with hydrocarbons, aqueous acids, alkali, fungi or other substances in the produced water.

The synthetic liner(s) shall also be resistant to deterioration by ultraviolet light, punctures and tearing, and shall be designed for the life of the pit.

5. The synthetic liner(s) shall be constructed, installed, and maintained in accordance with the manufacturers' specifications.
6. The synthetic liner(s) shall cover the bottom and interior sides of the pit with the edges secured with at least a twelve (12) inch deep anchor trench around the pit perimeter. Depending upon the size of the pit, an anchor trench deeper than twelve (12) inches may be necessary, such that the tensile force on the liner does not exceed its design capacity. It is the operator's responsibility to design and construct a liner system to contain fluids in the pit without compromising the integrity of the liner(s).
7. If used, synthetic liner field seams must be installed and tested in accordance with manufacturer recommendations. Testing results must be maintained by the operator for the life of the pit and provided to the Director upon request.
8. Pit sidewall slopes shall not be steeper than 1 vertical to 2 horizontal in order to facilitate installation of the bedding materials and the synthetic liner(s). If sidewall slopes exceed 1 vertical to 2 horizontal, then the operator must submit a site-specific pit design that will minimize the likelihood of damage to the liner by sharp rock edges and any other material protruding from the sidewalls. The pit design must be certified by a Professional Engineer, subject to review and approval by the Director prior to construction of the pit.
9. As a Condition of Approval for production pits requiring a Form 15, the Director may require other additional protective measures. These measures may include but are not limited to increased record-keeping requirements, monitoring systems, and leak detection systems. In making such a determination, the Director shall consider the surface and subsurface geology, the use and quality of potentially-affected ground water, the quality of the produced water, and the hydraulic conductivity of the surrounding soils, and the type of liner.

Hydrotesting

1. After installation of the uppermost liner and prior to operating the pit, the synthetic liner(s) shall be tested by filling the pit with at least four (4) feet of fresh water, measured from the base of the pit (not to exceed the two (2) foot freeboard requirement). The operator shall monitor the pit for leaks for a period of seventy-two (72) hours prior to draining the pit and commencing operations. Hydrotest monitoring results must be maintained by the operator for the life of the pit and provided to the Director upon request.
2. The operator must suspend operations and notify the Director within twenty-four (24) hours if leaks are observed. The operator must fix any leaks and repeat hydrotests as described above. Operations shall not

commence until a successful hydrotest is performed with no leaks observed.

Pit Monitoring

1. Pit fluid levels shall be monitored using a pit level indicator at least once every twelve (12) hours whenever fluid is present in the pit in quantities greater than de minimis amounts. The monitoring frequency shall increase to once every six (6) hours when the pit is being actively used for drilling, completion or production operations. Monitoring results must be documented and records maintained by the operator for the life of the pit and provided to the Director upon request.
2. The operator must cease use of the pit within forty-eight (48) hours if there is any observed loss of integrity from the pit liner or if the operator suspects a loss of more than five hundred (500) barrels of liquid from the pit, based on fluid level measurements or throughput measurements. The operator must notify the Director as soon as practicable within twenty-four (24) hours of detecting a leak. The pit shall be vacated as soon as practicable and use of the pit shall not resume until a successful hydrotest is performed with no leaks observed.

Suspension of Use

1. If operations are suspended and the pit is not in use for more than seven (7) calendar days, then fluids in the pit must be removed such that only de minimis amounts of fluids are left in the pit to hold down the synthetic liner(s).
2. After removing fluids, the operator shall continue to inspect the pit and record any observed leaks, punctures or tears at least once every twenty-four (24) hours while use of the pit is suspended.
3. The pit shall be inspected by the operator prior to re-use. If any leaks, punctures or tears are observed, then the synthetic liner must be replaced and hydrotested prior to resuming operations.
4. If operations are suspended for more than six (6) months, then the pit shall be closed, unless specifically approved by the Director.

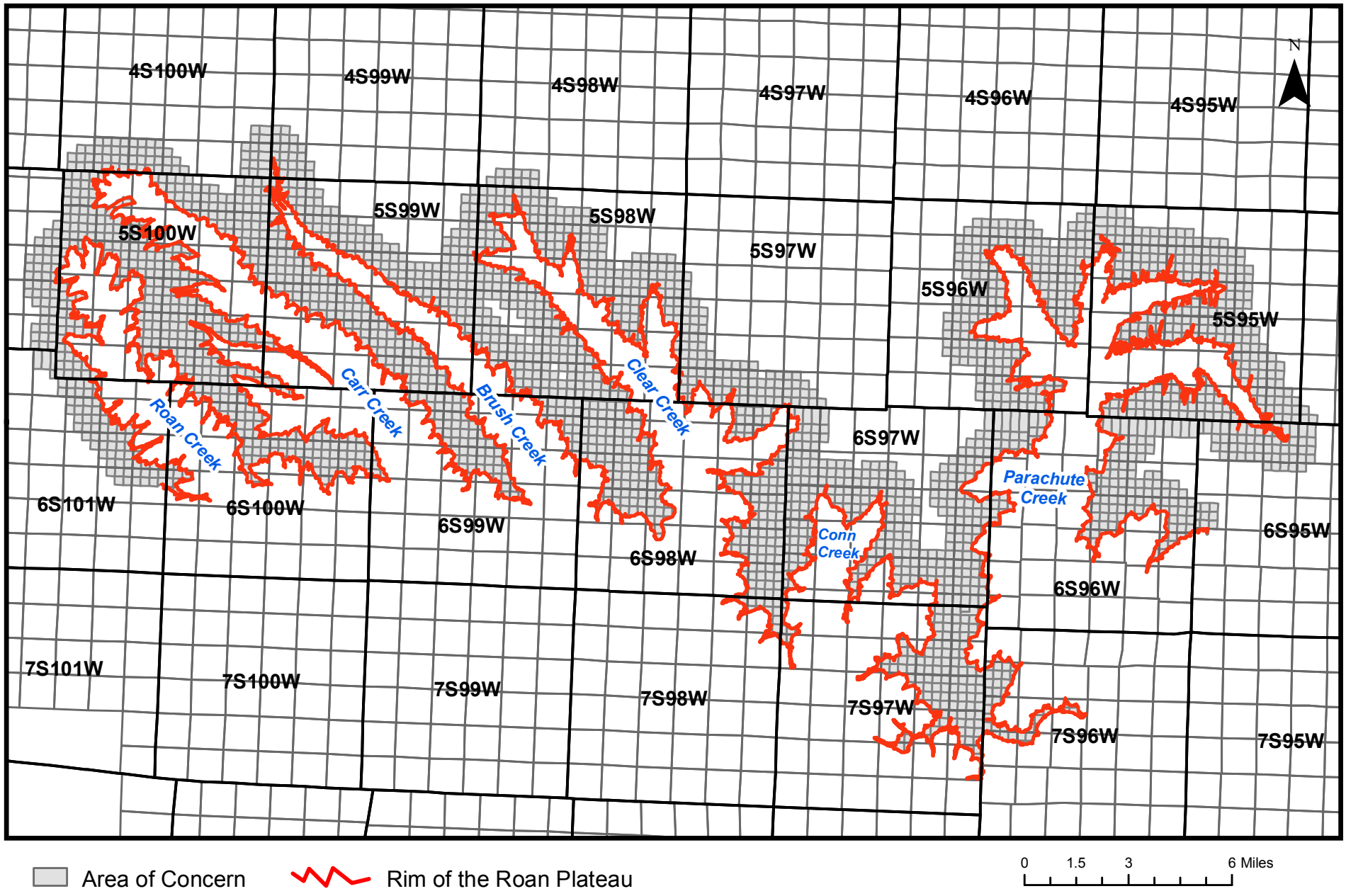
Safety

COGCC expects that operators will construct, monitor, and close pits as required in this NTO while accounting for safety of their personnel and equipment. COGCC understands that road closures are required on the Roan Plateau during adverse weather conditions, and in those situations, some of the timeframes required in this NTO may not be met. As soon as practicable after failing to meet

any of the timeframes specified herein because of adverse weather conditions or any other conditions outside of the operator's control, the operator shall notify the Director and provide a written explanation which justifies the exception.

Signed,

David Neslin
Acting Director



NOTICE TO OPERATORS DRILLING WELLS WITHIN 3/4 MILE OF THE RIM OF THE ROAN PLATEAU IN GARFIELD COUNTY - PIT DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS
JUNE 12, 2008