Amended Pit Rule Hearing

Bruce A Gantner Testimony

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-1
HEARING DATE: MAY 14, 2012

19.15.17.10 Siting Criteria

- Overview
  - Pits
    - Risk based criteria supporting two thresholds (water-based and other)
  - BGTs
    - Risk based criteria supporting reduced siting restrictions

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-2
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- Q. "**Temporary Pit**" means a pit, including a drilling or workover pit, which is constructed with the intent that the pit will hold liquids ~~for less than six months~~ and will be closed in less than one year. Temporary pits may be used for one or moer wells and located either onsite or offsite of a well drilling location. Any fresh water containment structure, such as a pond, pit, or other impoundment, is not a temporary pit.

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-3
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Temporary Pits - Siting

Water based drilling muds addressed by adding "low chlorides drilling fluids" definition

- **15,000 mg/liter threshold for low chlorides drilling fluids**

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-4
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l. "**Low Chloride fluids**" means fluids that contain less than 15,000 mg/liter of chlorides determined by analysis or process knowledge.

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-5
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Temporary and Multi-Well Fluid Management Pits - Siting

(changes in siting criteria)

Type	GW (feet)	Watercourse (feet)	Residence (feet)	Water well (feet)	Wetland (feet)
Low chloride Drilling Fluids	25	100	300	100	100
Other	50	300	300	300	300
Current Rule	50	300	300	500	500

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-6
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E. "**Continuously flowing watercourse**" means a river, stream or creek that is named or delineated by a solid blue line on a USGS quadrangle map having a scale factor of 1:24,000 and that typically has water flowing during the majority of the days of the year. This does not include ephemeral washes, arroyos, and similar depressions that do not have flowing water during the majority of the days of the year.

O. "**Significant watercourse**" means a watercourse with a defined bed and bank either named on a USGS 7.5 minute quadrangle map or ~~a first order~~ the next lower order tributary with a defined bed and bank of such watercourse.

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-7
HEARING DATE: MAY 14, 2012

Below Grade Tanks - Siting

(changes in siting criteria)

Type	GW (feet)	Watercourse (feet)	Wetlands (feet)	Water well (feet)
Proposed Rule	10	100	100	100
Current Rule	50	300	500	500

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-8
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INCREASED COSTS – SITING:

⟹ Installation of below grade tanks:

$50,000 - $70,000 per location

⟹ Additional costs for handling cuttings due to inability to bury on site:

$100,000 - $150,000 per location

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-9
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INCREASE COSTS TO DRILLING WITH A CLOSE-LOOP SYSTEM:

$105,000 PER WELL

2010 – Present: 19% of wells drilled by ConocoPhillips in the San Juan Basin. 47 wells had to use a closed-loop system

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-10
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19.15.17.13 Closure

(previously "Closure" under current Pit Rule)

Overview

- Improve clarity and reduce redundancy (from 6 pages to 3 pages)
- Establish scientifically supportable thresholds
- Tables vs. redundant text

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-11
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A. Closure of Pits, Drying Pads, and BGTs (where waste is hauled to third party)

- Excavate contents/liner and haul
- Test soils beneath liner/unit for evidence of release
- Table I reflects revised thresholds
- If release confirmed, discuss further steps with NMOCD
- If no release, close, re-contour and re-vegetate

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-12
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B. Closure of Pits and Drying Pads

(where wastes are disposed in-place or in nearby trench)

- Remove liquids
- Stabilize or solidify contents (3:1 max)
- Test contents
- Table II represents revised thresholds
- If contents fail, then haul contents and close per criteria in previous slide

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-13
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B. Closure of Pits and Drying Pads (cont.)

(where wastes are disposed in-place or in nearby trench)

- If contents pass, either use temporary pit or construct new earthen trench with liner
- No 100 foot proximity limitation as in present rule
- Further stabilize or solidify contents (3:1 max) as needed
- Cover with 4 feet of compacted soil (synthetic liner cap is no longer required for trench disposal)
- Reclaim location per site reclamation criteria

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-14
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C. Alternative Closure Requirements

- Operator may apply to district for alternative closure method
- District shall approve if the operator demonstrates that the alternative protects groundwater, surface water, and public health, welfare, and the environment

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-15
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D. Closure Notice and Report

- Temporary Pit
  - Notify appropriate district office within 72 hours

- Permanent Pit
  - Notify Santa Fe Environmental Bureau at least 60 days before commencing closure

- Multi-Well Fluid Management Pit
  - Notify appropriate district office within 72 hours

- BGTs
  - Notify appropriate district office within 72 hours

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-16
HEARING DATE: MAY 14, 2012

E. Timing Requirements for Closure

- Temporary and Permanent Pits
  - Same timing as in current pit rule
  - Clarifies that the operator shall note date on C103 or C105 upon completion of rig activity

- Multi-Well Fluid Management Pits
  - Closure within 6 months of ceased use

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CASE NO. 14784 NMOGA EXHIBIT 3-17
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E. Timing Requirements for Closure

Below Grade Tanks

- Eliminate requirement to close within 5 years of rule (provided tank has integrity)
- Eliminate requirement to close upon sale, transfer, or not meeting design criteria

- As long as BGT continues to meet integrity, it can continue to operate.

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-18
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S. "**Visible**" when used with respect to oil on the surface of a pit means any sheen that occupies thirty percent of more of the total pit liquid surface area.

BEFORE THE OIL CONSERVATION COMMISSION
CASE NO. 14784 NMOGA EXHIBIT 3-19
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H. "**Floodplain**" means US Army Corps of Engineers or FEMA documented 100-year floodplain.

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