From: A.Baldrige@shell.com
To: Deranleau, Greg
Subject: RE: COA language
Date: Wednesday, August 08, 2012 1:57:09 PM

Greg,

We are in agreement with those COAs. They are in accordance with what we are already doing as routine practice for the wells.

Thanks,
Anne

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From: Deranleau, Greg [mailto:Greg.Deranleau@state.co.us]
Sent: Wednesday, August 08, 2012 1:46 PM
To: Baldrige, Anne SEPCO-EPW
Cc: Kubeczko, Dave
Subject: COA language

Anne,
I am conducting a final review in preparation for director approval of your Form 2s and 2As in Moffat County (Dry Sage 1-21, Dry Sage 1-23, Hamilton 1-29). Since you have proposed utilizing closed loop systems for all these, and have not indicated that drilling pits will be utilized, I would like to modify the language in the COAs presented by Dave Kubeczko to eliminate any references to pits.

Please approve the following changes. If you would like to discuss further, please don't hesitate to contact me.

Current COA:

> A closed loop system must be implemented during drilling (which operator has indicated on the Form 2A); or, if a drilling pit is constructed, it must be lined. All cuttings generated during drilling with oil based muds or high chloride/TDS mud must be kept in the lined drilling pit, or placed either in containers or on a lined/bermed portion of the well pad; prior to offsite disposal. The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.

Proposed revised COA:

> A closed loop system must be implemented during drilling (which operator has indicated on the Form 2A). All cuttings generated during drilling with oil based muds or high chloride/TDS mud must be kept or placed either in containers or on a lined and bermed portion of the well pad

prior to offsite disposal. The moisture content of any drill cuttings managed onsite must be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.

Current COA:

If the well is to be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or pit located on the well pad or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.

Proposed revised COA

If the well is to be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel located on the well pad or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.

Thanks for your help, I know you are wanting these as soon as possible, I'm sorry for changing things up at the last minute.

Regards,

Greg Deranleau
Oil and Gas Location Assessment Supervisor

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