MEDIA ADVISORY – ONGOING OCC EARTHQUAKE RESPONSE

The Oklahoma Corporation Commission’s Oil and Gas Conservation Division (OGCD) has issued new directives to disposal well operators in Oklahoma as part of the continuing evolution of the agency’s induced seismicity “traffic light” system.

Under the new directives, disposal well operators in “Areas Of Interest” that inject into the Arbuckle formation (the state’s deepest formation) have until April 18, 2015, to prove to the OGCD that the disposal well is not disposing below the Arbuckle formation. There is broad agreement among seismologists that disposal below the Arbuckle poses a potential risk of causing earthquakes, as it puts the well in communication with the solid “basement” rock.

Operators who do not show that the well is not disposing below the Arbuckle and who do not have an approved plugging plan will be required to reduce their disposal volume by 50 percent.

The directive applies to 347 of the approximately 900 Arbuckle disposal wells in Oklahoma.

At the same time, the definition of “Area Of Interest” (AOI) is evolving to include “seismic swarms.”
  a. “Swarm” is defined as an area consisting of at least two events with epicenters within .25 miles of one another, with at least one event with a magnitude 3.0 or higher.
  b. “Area Of Interest” is a ten kilometer area (approximately six miles) with the central mass of the swarm serving as the area center.

Previously, a ten kilometer circle around a 4.0 magnitude earthquake constituted an AOI. The change is expected to more than double the number of disposal wells within an AOI.

The “traffic light” system was first put in place in 2013 in response to the concerns over the possibility of earthquake activity being caused by oil and gas wastewater disposal wells in Oklahoma. It has been in a state of constant evolution since then, as new data becomes available.

(more)
Other elements of the traffic light system include:

- The “yellow light” permitting program that requires seismicity review for any proposed disposal well and requires special permitting based on seismicity concerns for any well:
  - proposed within three miles of a stressed fault, even in the absence of seismicity
  - proposed within ten kilometers of an earthquake “swarm” or magnitude 4.0 event
- Rules increasing from monthly to daily the required recording of well pressure and volume from all Arbuckle wells in the state
- Rules requiring Mechanical Integrity Tests for wells disposing of volumes of 20,000 barrels a day or more have increased from once every five years to every year, or more often if so directed by the Commission
- Full review of disposal well operations in an Area of Interest

None of these elements should in any way be viewed as a final step. The traffic light system will continue to evolve.

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Editors, Producers: See attached letter to operators, maps