



STAFF WORKSHOP

**POTENTIAL EFFECTS OF LAND SUBSIDENCE
TO NATURAL GAS & OIL INFRASTRUCTURE**

Tuesday, November 10, 2015

1st Floor Hearing Room B (Imbrecht Room)

1516 Ninth Street, Sacramento, CA 95814-5512

California Energy Commission staff will conduct a workshop to open a discussion about the extremely fast rate of land subsidence in parts of California and how it may be affecting the natural gas & oil infrastructure. The ongoing drought and extensive extraction of groundwater have accelerated a non-seismic downward displacement of land (subsidence). At its current rate, subsidence may pose a danger to natural gas pipelines, natural gas & oil wells, natural gas storage system, aqueducts, and other facilities.

1:00 – 1:15 PM: Welcome and Introduction (Chair Robert Weisenmiller)

- Laurie ten Hope (CEC) (5 minutes)
- Arthur O'Donnell (CPUC) (5 minutes)

1:15 – 2:00 PM: Drought-induced Subsidence and Potential Impacts to the Natural Gas & Oil Systems (moderated by Guido Franco)

- Cathleen Jones (Jet Propulsion Laboratory/NASA) (20 minutes)
- Sonya Ziaja and David Stoms (CEC) (10 minutes)

Discussion and questions from the audience

2:00 – 2:10 PM: Break

2:10 – 3:20 PM: Safety of the natural gas transmission pipelines, natural gas & oil wells, and other utilities (moderated by Avtar Bining)

Presentations:

- Avtar Bining (CEC) (10 min)
- Christine Cowser Chapman (PG&E) (10 min)

FINAL AGENDA

Panel discussion:

- **Robert Smith & James Merritt** (US DOT/PHMSA) (5 minutes)
- **Jeanine Jones** (DWR) (5 minutes)
- **Chris Madugo** (PG&E) (5 minutes)
- **Mehrshad Ketabdar** (SoCalGas) (5 minutes)

Discussion and questions from the audience

3:20 – 4:10 PM: Potential impacts of subsidence to natural gas & oil wells (moderated by David Stoms)

- **Mary Kang** (Stanford University) (15 minutes)
- **Marc Fischer** (Lawrence Berkeley National Laboratory) (15 minutes)

Discussion and questions from the audience

4:10 PM: Adjourn