

BOULDER COUNTY AIR QUALITY MONITORING STUDY ASSESSING VOLATILE ORGANIC COMPOUNDS AND COST-EFFECTIVE MONITORING TECHNIQUES

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Boulder County Public Health

August 27, 2013

Oil and Gas Development

- Production in the Wattenburg has nearly doubled since 2000
- 5,300 approved drilling permits in Weld County
- New Boulder County Regulations adopted



Other Front Range Air Quality Studies

- EPA Air Toxics Study (BCPH and CU): 2006-08
- CU Erie Monitoring Studies: 2012
- CDPHE Erie Study: 2012
- CU NSF – AirWaterGas Study: 2013 - 18
- CSU-Garfield County Study: 2013 -16
- CDPHE-CSU Front Range Study: 2014-17



Boulder County Study

- Use traditional “canister” sampling techniques
- Field test cost-effective monitoring techniques
 - Low-cost absorbent tube samplers
- Oil and Gas Development Pod (OG-Pod)



Sampling and Sites

- Four sites near existing production wells
- One background site
- Maintain sites for up to four months
- Sample for OG-related emissions:
 - methane, VOC's, benzene, others
 - meteorological data



Deliverables

- Protocols and evaluation of canister samples and absorbent tubes and OG Pod
- Quantitative methane and VOC data for at least 60 samples (including background site)
- Evaluation of air quality impacts