

# CDPHE Agency Update

Recent Oil & Gas activities and focus

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Executive Director

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**COLORADO**

Department of Public  
Health & Environment



## Air Quality Monitoring Updates

- Monitoring data at locations in Garfield and Weld Counties show significant reductions in ambient air levels of O&G related hydrocarbons
  - Approximately 45-68% reduction in non-methane organic compounds (NMOC) from 2008-2018 at various Garfield County monitoring locations (Bell/Melton Ranch and Battlement Mesa)
  - Approximately 55% NMOC reduction from 2012-2018 at various Weld County monitoring locations (Platteville)





## Air Pollution Control Division (APCD) Stakeholder Processes

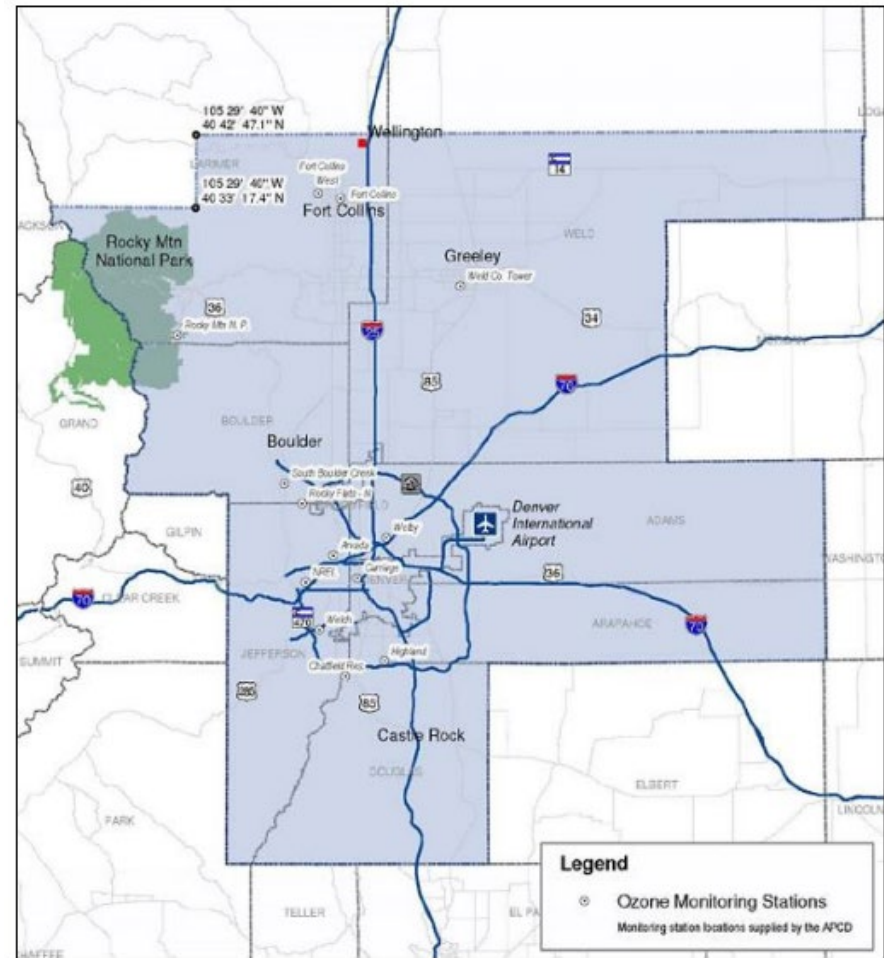
- State-wide Hydrocarbon Emission Reduction (SHER) Task Force
  - Evaluate cost-effective hydrocarbon emission reductions from the statewide O&G sector (upstream, midstream, and transmission)
- Pneumatic Controllers Task Force
  - Studies aimed at quantifying emissions from gas driven pneumatic devices and assessing the cost effectiveness of existing pneumatic device inspection and maintenance program





# Denver Metro/North Front Range Ozone Non-Attainment

- Due to high ozone values from 2016-2018 Denver Metro/North Front Range area will be “bumped-up” to serious non-attainment status sometime in 2019
  - State will need to submit attainment plan to EPA sometime in 2020 or 2021
  - Bump-up is limited to DM/NFR area and will not impact the rest of the state





# Protect Public Health and Welfare (Senate Bill 181)

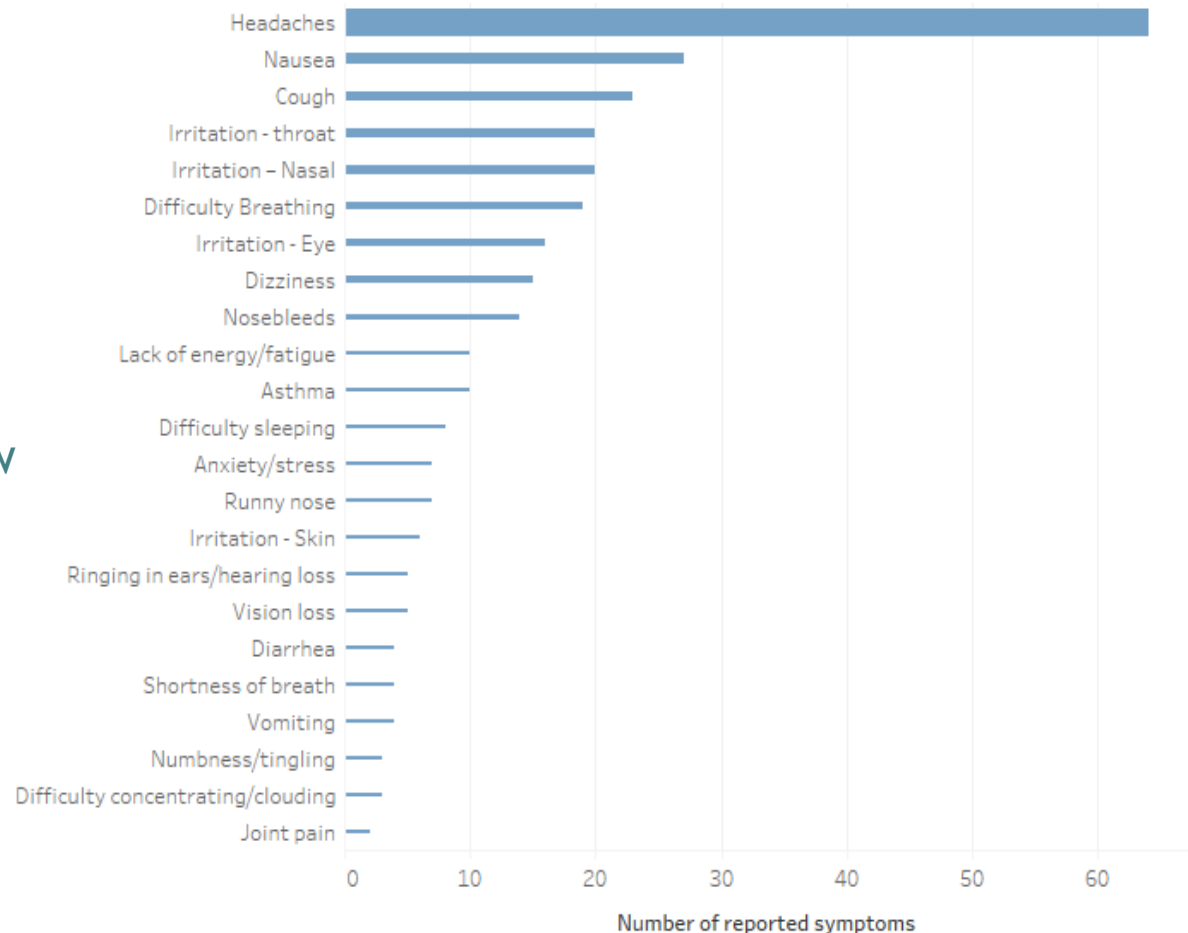
- In addition to substantial changes to COGCC and expansion of local control, builds on Colorado's efforts to reduce air emissions from O&G sector
- Requires the Air Quality Control Commission (AQCC) to:
  - Adopt regulations to minimize emissions from O&G, midstream and transmission sectors (methane, VOC, other hydrocarbons and NOx)
  - Consider additional LDAR and other monitoring requirements
  - Consider requirements that facilities use pneumatic devices that don't vent natural gas
- Clarifies that AQCC can regulate emissions from pre-production activities including drilling and completion emissions
- CDPHE: *"Industry has an open invitation to be a part of these solutions and we look forward to frequent communication and engagement."*



# Oil and Gas Health Information and Response (OGHIR)

- Over 650 concerns reported to OGHIR since Oct 2015

- 80% of odor complaints coincided with drilling activities
- Most complaints localized in communities where new O&G development is occurring
- Northern Front Range counties account for approximately 75% of the concerns reported to OGHIR

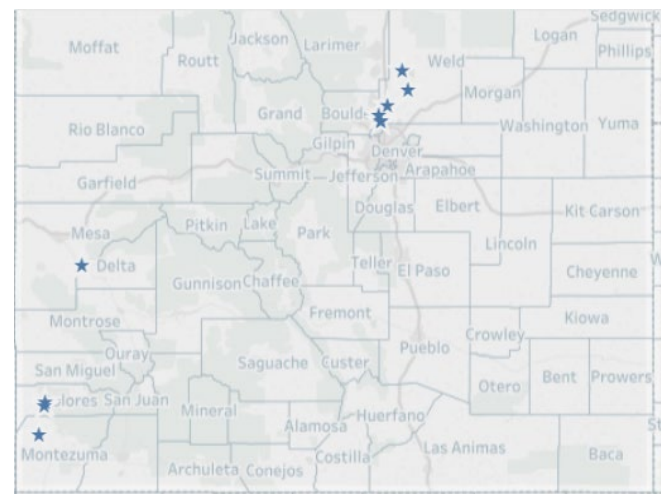




## OGHIR, Cont'd

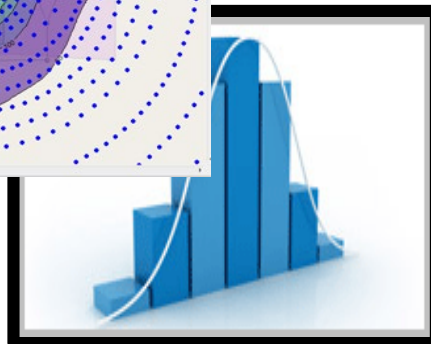
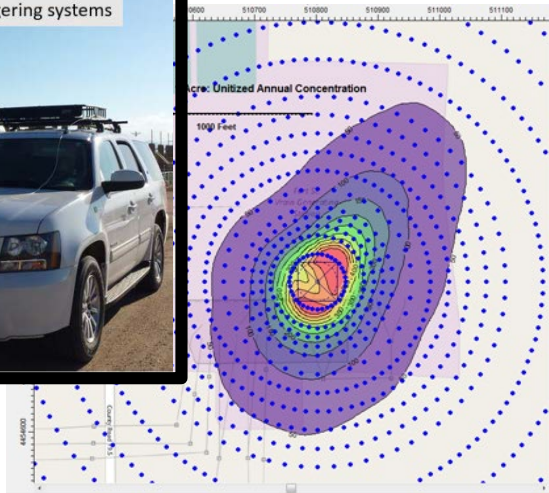
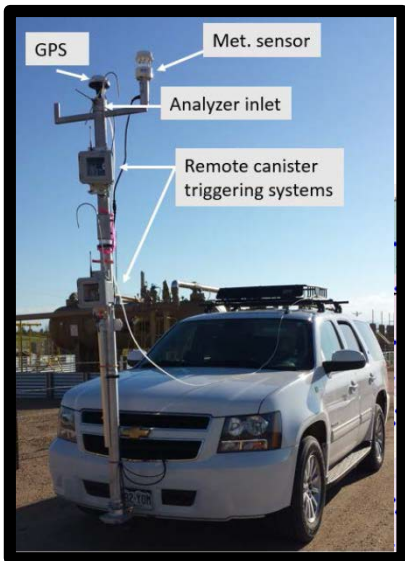
- 10 community exposure investigations, including 6 with the Colorado Air Monitoring Mobile Lab (CAMML)
  - One exposure investigation conducted near OG site through multiple phases of development (drilling, hydraulic fracturing, flowback)
  - Multiple single samples (SUMMA canister)
  - Quarterly evaluations of ongoing air monitoring in Battlement Mesa

**To date, we have not found any concentrations above short or long-term health guideline values (\*conclusions are only relevant to the time period and location in which samples were collected)**





# Update on Oil and Gas Risk Assessment



- Using emission data from CSU studies (North Front Range and Garfield County)
- Dispersion model-based exposures
- Calculate potential health risk
  - By distance
  - By phase of operation
  - Directly attributable to oil and gas activities
- Findings are under a peer review process.





## Hazardous Materials and Waste Management Division (HMWMD)

- SB 18-245 gave HMWMD the authority to promulgate rules concerning Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM)
  - HMWMD hired Rule Engineering to prepare a draft report
  - Draft TERNORM report is available on HMWMD's website and the public comment period closes on April 19th



# Water Quality Control Division (WQCD)

- Pollution Prevention (Clean Water Act) Activities
  - WQCD issues permits and requires spill notifications for unpermitted surface water discharges and for groundwater discharges when they are outside of the authority of COGCC, including construction stormwater, hydrostatic testing for pipeline operations, and produced water discharges to surface water (if applicable)
    - New GP for construction stormwater discharges effective April 1, 2019
- Safe Drinking Water Protection Activities
  - WQCD works in coordination with COGCC to implement COGCC Rule 317B to ensure that oil and gas operations in drinking water source supply areas are effectively managed



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