

CDPHE's Regulation of Oil and Gas Development

Commerce City
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COLORADO
Department of Public
Health & Environment

Overview

- Colorado Oil and Gas Conservation Commission (COGCC) and Colorado Department of Public Health and Environment (CDPHE) regulatory authority
- Oil and Gas Health Information and Response Program (OGHIRP) (non-regulatory)

CDPHE's Consultation on COGCC Rules

- 300 Series – Drilling, Development, Production and Abandonment
 - Rule 317B Public Water System Protection
 - Rule 325 Underground Disposal of Water
- 600 Series – Safety Regulations
 - Rule 603 Drilling and Well Servicing Operations and High Density Area Rules
 - Rule 608 Coalbed Methane Wells
- 800 Series – Aesthetic and Noise Control Regulations
 - Rule 805 Odors and Dust
- 900 Series – E&P Waste Management
- 1000 Series – Reclamation Regulations
 - Rule 1002.f Stormwater Management

Rule 306.d. Consultation Procedure

- Consultation triggered when:
 - Local government designee requests a consultation with CDPHE on a Form 2 or Form 2A (within 14 days of receiving notice)
 - Operator seeks a variance from rules where CDPHE has a consultative role
 - Operator requests a modification to an existing COGCC order to increase well density
 - COGCC develops basin-wide order that may impact public health, safety, welfare, or the environment

Rule 306.d. Consultation Procedure Cont.

- 40 day consultation period
 - May be 26 days if LGD uses full 14 days to request
- Focus on identifying and mitigating potential impacts
 - Review project materials
 - Coordinate with stakeholders
- Develop written conditions of approval
 - Monitoring
 - Best management practices
 - Variance
- COGCC decides whether to adopt CDPHE's recommendation

CDPHE's Oil and Gas Regulatory Authority

- Water
- Solid & Hazardous Waste
- Air



Regulation of State Waters

- In 1989, S.B. 181 amended the Water Quality Control Act to define the responsibilities of state agencies to implement water quality protection of state waters.
 - CDPHE Water Quality Control Commission (WQCC)- adopts water quality standards
 - COGCC- implements groundwater standards
 - CDPHE Water Quality Control Division (WQCD)- issues surface water discharge permits
 - 2000 MOA Between WQCD and COGCC: Response to Spills/Releases to Surface Water

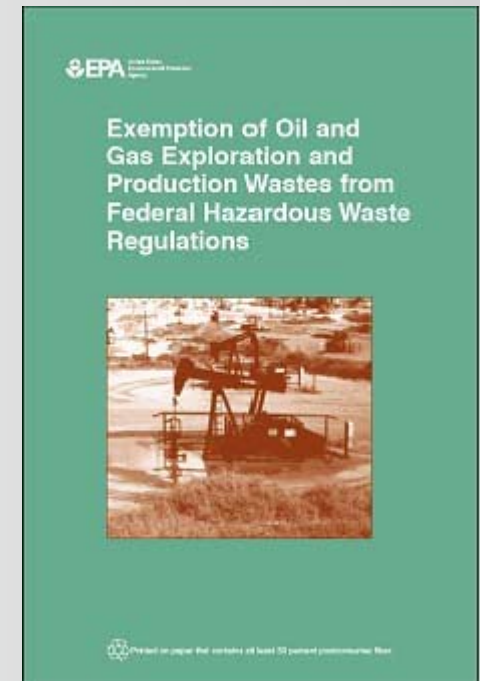
Stormwater Management

- Stormwater construction permits are issued by WQCD
- COGCC rules complement the WQCD stormwater construction permit
- Rules require the use of BMPs to control stormwater discharges after the WQCD permit has expired



Regulation of Solid and Hazardous Waste

- Exploration and Production (E&P) wastes are considered solid wastes due to the EPA study completed in 1988
- Commercial Centralized E&P Waste Management Facility are regulated by CDPHE's Hazardous Materials and Waste Management Division
- Non-Commercial Centralized E&P Waste Management Facility are regulated COGCC



Regulation of Air Quality

- The APCD develops air quality regulations, issues permits, implements the air quality monitoring program, conducts inspections and enforces air quality regulations
- Colorado has 60 air quality monitoring sites throughout the state to monitor air quality and identify emerging trends



Regulation of Air Quality, Cont.

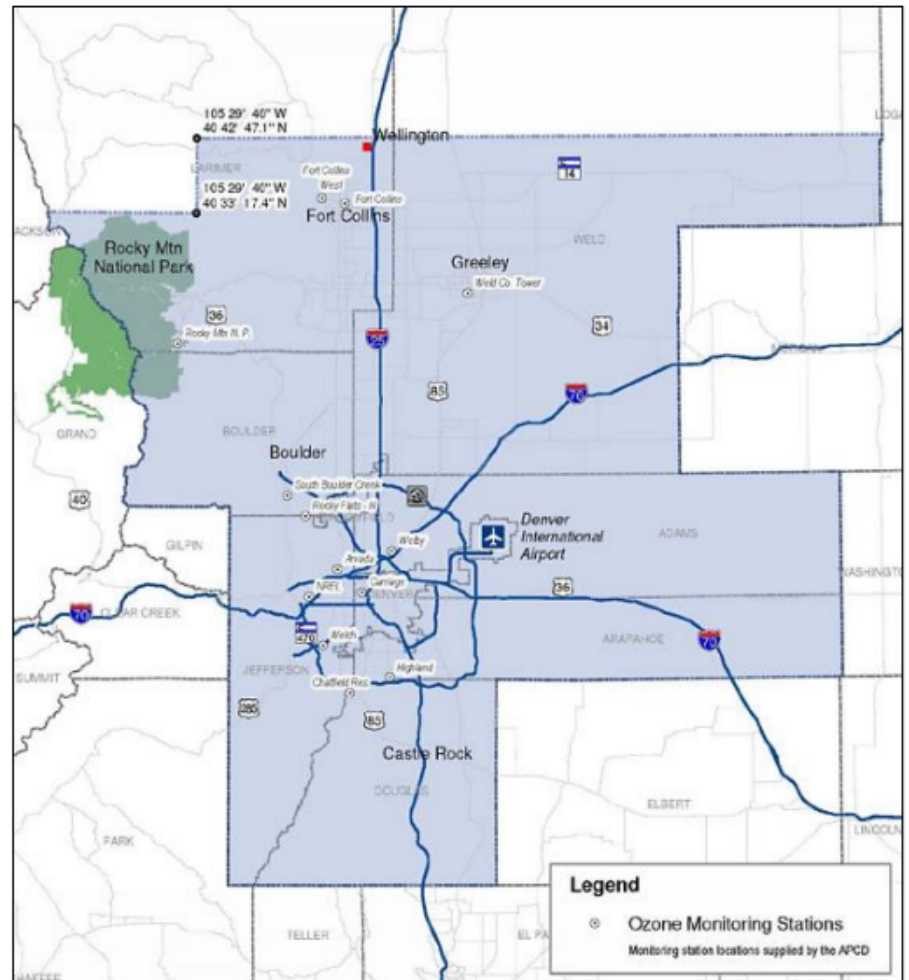
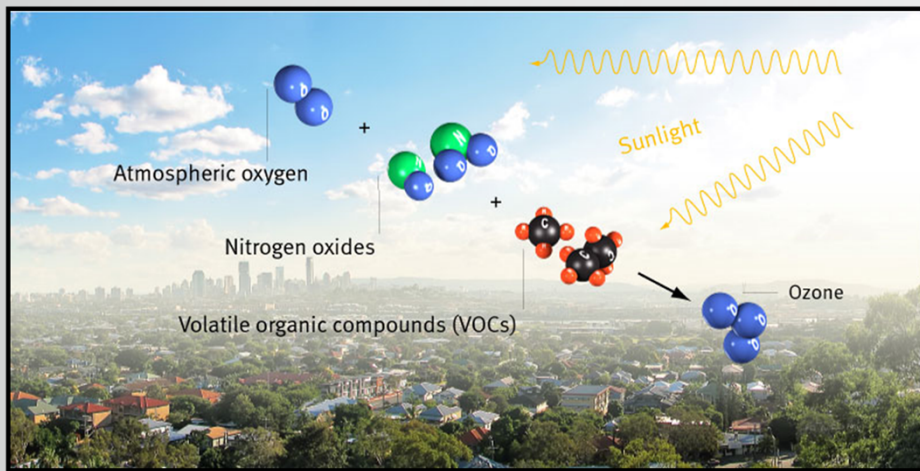
- CDPHE air quality rules covering oil and gas industry
 - Regulation 1- Opacity (e.g. smoke and dust)
 - Regulation 2- Odor
 - Regulation 3- Statewide Permitting Requirements
 - Regulation 6- New Source Performance Standards (NSPS)
 - E.g. NSPS Kb (Storage tanks) and NSPS KKK (Fugitive VOC emissions)
 - Regulation 7- Control of Ozone Precursors and Oil and Gas Hydrocarbon Emissions
 - Regulation 8- Maximum Achievable Control Technology (MACT) Standards
 - E.g. MACT HH (Oil and natural gas production facilities) and MACT HHH (Natural gas transmission and storage facilities)

Air Permitting 101

- Air Pollution Emission Notice (APEN)
- Permit
 - Authorizes legal emissions of air pollutants
 - Defines what pollutants can be emitted
 - Identifies emission reduction measures
 - Specify how emissions must be measured and reported
- Small Business Assistance Program

Ozone Nonattainment

Ozone Formation



Nonattainment Area Map

APCD Data Availability

- Continuous data posted hourly and forecasting posted daily on APCD Technical Services website
 - <http://www.colorado.gov/airquality>

Example: No Action Day & No Advisory



Example: Action Day & Advisory



Oil and Gas Health Information and Response Program

- Launched in Fall of 2015 at recommendation of Oil and Gas Task Force
- Collaboration between Disease Control and Environmental Epidemiology Division and Air Pollution Control Division
 - Health concern investigator, toxicologists, consulting physician, air quality scientists
- Tracks and investigates health concerns
- Provides citizens with health science information



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Investigation Process

- Track health concerns
 - Reported via CO HELP (303-389-1687) or online at www.colorado.gov/oghealth
- Coordinate with stakeholders
 - COGCC, APCD, Operators, local govt.
- Investigate
- Conduct air quality sampling
 - Screening- summa canisters and sorbent tubes
 - Comprehensive- mobile laboratory
- Evaluate potential health risks
- Generate report and post to online information clearinghouse

Investigation Results

- Over 500 concerns reported to OGHIR since Oct 2015
- Northern Front Range counties account for 76% of reported concerns to the OGHIR Program
- 6 community exposure investigations
 - All communities reporting multiple symptoms
 - Mobile lab deployed 4 different times to 2 communities in DJ Basin
 - Over 800 hours of air samples
 - 64 oil and gas-related compounds
 - Multiple samples collected during times when people were experiencing symptoms
- Battlement Mesa health risk assessment (March 26, 2018)
- Based on currently available air monitoring data, investigations have determined that the risk of harmful health effects has been low for residents living near oil and gas operations (500 feet or greater)





Questions?

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