



Colorado Department  
of Public Health  
and Environment

# Air Quality Permitting



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# Key Air Pollutants

- Particulate Matter (dust, other particles)
- Combustion Gases – CO, NO<sub>x</sub>, SO<sub>2</sub>
- Volatile Organic Compounds (VOCs)
- Hazardous Air Pollutants (HAPs)
- Greenhouse Gases (GHGs)





# What is an Air Permit?

- Document that authorizes the legal emissions of air pollutants under certain terms and conditions
- Defines what pollutants can be emitted and at what levels
- Identifies what steps a facility must take to reduce emissions
- Specifies how emissions must be measured and reported

# Why Do We Issue Permits?

- Federal Clean Air Act (Major Source New Source Review and Operating Permits)
- Colorado Statute and Regulations (Major and Minor Source Permits)
- Helps ensure compliance with the National Ambient Air Quality Standards





# APCD Permitting Units

- Construction Permits (Non-Oil and Gas) – Chip Hancock
  - ◆ 8 permit engineers & technicians
- Operating Permits – Matt Burgett
  - ◆ 6 permit engineers
- Oil and Gas Permits (O&G Team) – Chris Laplante and Stefanie Rucker
  - ◆ 13 permit engineers

# Air Pollutant Emission Notices

- Notification form and also part of a permit application
- APEN applicability thresholds
  - 1 or 2 tons per year (tpy) of uncontrolled actual emissions depending on area
  - HAPs range from 50 to 5,000 lbs/yr
- 2013 rulemaking process could alter APEN and construction permit thresholds

# APEN Information

- APEN information includes:
  - Description of emission point
  - Fuel types and consumption rates
  - Requested process rates
  - Emission estimates
- Renew every 5 years



# Determining Emissions



- Emission factors
- Manufacturer specs
- Process simulators
- Data from other facilities or studies
- Continuous monitors
- Stack tests

# Construction Permits

- Really pre-construction permits, must be obtained before starting construction
- Permit thresholds for criteria pollutants range from 1 to 10 tons per year
- Can include modeling review and public notice
- Includes PSD and Non-attainment NSR permits



# Prevention of Significant Deterioration (PSD)

- Historical context
- Applies in attainment areas
- New sources (100 or 250 tpy of criteria pollutants or 100,000 tpy of GHGs as CO<sub>2e</sub>)
- Major modifications at existing sources
- Some limited exemptions, including routine maintenance, repair and replacement

# PSD Requirements

- Best Available Control Technology (BACT)
- Monitoring and modeling for air quality standards, visibility and other impacts
- Public comment period and public hearing





# Operating (Title V) Permits

- Applies to sources with emissions  $\geq 100$  tpy of criteria pollutants, 10/25 tpy of HAPs or 100,000 tpy of GHGs as CO<sub>2e</sub>
- Issued after sources are constructed and operating
- Incorporates all existing requirements and adds monitoring/recordkeeping/reporting provisions
- About 225 Title V sources in Colorado

# Title V Permit Process

- Operating Permits (OPs) expire every 5 years
- Facilities continue to operate under existing OP until renewal OP is issued
- All new and renewal OPs go through public comment
- They also go through U.S. Environmental Protection Agency (EPA) review
  - ◆ EPA has veto authority

# Permit Processing Times/Fees

- Without public notice: 90 days
- With public notice: 135 days
- PSD – 12 months, OPs – 18 months
- Filing fees: \$152.90 per APEN
- Processing fees: \$76.45 per hour
- Annual fees on emissions:
  - \$22.90 per ton of criteria pollutants
  - \$152.90 per ton of HAPs



# General Permits (GPs)

- One permit, companies apply for coverage under the GP
- Public comment period during GP development
- Sources can choose GP or individual permit
- Issued GPs for 4 source categories – O&G condensate tanks, O&G produced water tanks, natural gas-fired engines and land development
- APCD currently working on additional GPs

# Permit Exempt Pilot

- Designed to eliminate need for engineer to review application and issue APEN or Permit Exempt letter
- Direct sources with questions to:  
[www.colorado.gov/cdphe/sspermits](http://www.colorado.gov/cdphe/sspermits)
- Click on “Determine if you need an Air Permit or APEN”
- Launch Date of this Site: October 15, 2013

# Ongoing Requirements

- Self-certification
- Proper operation and maintenance
- Recordkeeping
- Periodic inspections
- Annual fees



EPA Photo

# Approx. 2012 Inventory Numbers for Colorado

- 15,000 total active facilities
- 27,000 total emission points
- 20,000 of the emission points have permits
- Of these totals: 9,500 facilities, 15,000 points and 11,000 permitted points are in the oil and gas sector



# Approx. 2012 Permitting Numbers

- 4,600 Construction Permit actions
  - ◆ 3,100 individual actions
  - ◆ 1,500 general permit coverages
- 50 Operating Permit actions

# APCD – Prior to Public Comment

- Division reviews permit application
- As necessary, requests additional info and works with applicant to resolve issues
- Completes technical and regulatory review and documents in Preliminary Analysis
- Prepares draft permit that we believe meets all applicable requirements
- Publishes public notice in newspaper and on web site

# Comments Given Strong Consideration

- Technical or regulatory basis for permit
- Did the Division calculate emissions correctly?
- Were the applicable emission limitation and control technology standards included?
- Was the air quality modeling analysis done properly and are air quality standards protected?
- Are the monitoring and reporting methods sufficient to adequately demonstrate compliance?

# Issues Not Readily Addressed in the Air Permit Process

- Land use or zoning issues
- Other non-air quality permit issues
- Type of facility, process or fuel selected if standards are being met
- Perceptions about company
- Regulations that are not currently in effect



# Contact Information



- APCD Web Site

[www.colorado.gov/cdphe/apcd](http://www.colorado.gov/cdphe/apcd)

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# Questions?

