



Environmental Hits

Ohio Gas Association
2020 Technical Conference

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SC&A Company Overview

- ◆ SC&A was founded in 1981 to provide support for federal environmental & energy programs
- ◆ Today we provide support to private clients and government agencies in multiple areas:
 - Air quality
 - Communication & information systems
 - Emergency preparedness & response
 - Environmental, health, & safety
 - Nuclear and radiological sciences
- ◆ Offices in 14 states

Topics

The Classics

- Subparts 0000 / 0000a
- National Ambient Air Quality Standards
- Waters of the United States

New Hits

- Oil and Gas Sector: National Emission Standards for Hazardous Air Pollutants Review (Subparts HH / HHH)
- Once-in, Always-in Repeal
- Chemical Accident Prevention Provisions
- Chemical Accident Release Reporting



“The more things change, the more they stay the same”
Tom Keifer, “The More Things Change”

Subparts OOOO / OOOOa

- ◆ Oil and Gas New Source Performance Standards
 - Title 40 of the Code of Federal Regulations, (40 CFR) Part 60, Subpart OOOO: Aug. 24, 2011 – Sep. 18, 2015
 - Subpart OOOOa: After Sep. 18, 2015
- ◆ In year three of reconsideration, EPA continues to develop proposals
 - 2018 proposal to reduce frequency of fugitive emissions testing and repair requirements
 - 2019 proposal to remove all transmission / storage requirements and remove methane requirements

2019 Proposal

- ◆ Remove all transmission / storage requirements
 - Original 1979 listing for source category only focused on production and did not include transmission / storage
 - EPA expanded source category in 2011 to include transmission / storage sources
 - After reconsideration, EPA now believes they must make a separate applicability determination for a transmission / storage New Source Performance Standard

Subparts 0000 / 0000a

2019 Proposal

◆ Remove methane requirements

- 0000 / 0000a requires use of Method 21 “sniffers” or optical gas imaging (OGI) to identify natural gas leaks
 - Natural gas contains both methane and volatile organic compounds (VOC)
 - Sniffers and OGI are calibrated to detect methane leaks
 - Methane is a greenhouse gas (GHG)
 - VOC are any other organic compound than methane and ethane
- No changes to compliance requirements
 - 0000 requirements are to reduce VOC emissions
 - 0000a requirements are to reduce VOC and methane emissions
 - No change to emissions limits, measurements, leak detectors, etc.

Subparts 0000 / 0000a

2019 Proposal

◆ Alternative Proposal

- EPA may only remove methane requirements and keep transmission / storage in 0000 / 0000a

◆ Current Status

• 2018 Proposal

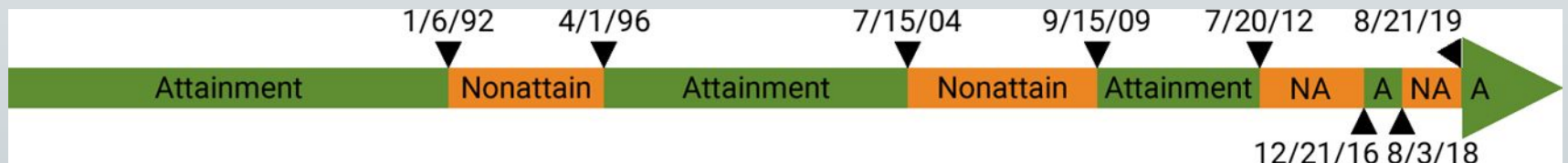
- EPA received over 509,156 comments
- EPA intends to issue final rule later this year

• 2019 Proposal

- EPA received over 294,599 comments
- EPA intends to issue final rule later this year
- Final rule may exclude transmission / storage from 0000a

National Ambient Air Quality Standards

- ◆ EPA plans to retain particulate matter (PM) & ozone National Ambient Air Quality Standards (NAAQS)
 - PM_{2.5} / PM₁₀ NAAQS proposed on Apr. 30, 2020
 - All areas in Ohio designated attainment for PM_{2.5} / PM₁₀
 - Ozone NAAQS proposed on Jul. 13, 2020
 - 0.070 ppm, 8-hour average
 - Cleveland and Cincinnati metro areas remain non-attainment
 - Columbus metro area designated attainment on Aug. 21, 2019



Waters of the United States

- ◆ EPA and Army Corps of Engineers repealed 2015 rule expanding Waters of the U.S. definition
 - Published Apr. 21, 2020; effective Jun. 20, 2020
- ◆ Four categories of **navigable** waters:
 1. Territorial seas and traditional navigable waters
 2. Perennial and intermittent tributaries to those waters
 - Typical year: Flowing continuously during at least certain times of the year for the past 30 years
 3. Certain lakes, ponds, and impoundments
 4. Wetlands adjacent to jurisdictional waters
 - Adjacent wetlands: meaningfully connected to other jurisdictional waters (abutting or regular communication)

Waters of the United States

- ◆ Ohio EPA developed a general permit for impacts to ephemeral streams
 - Filling Category 1 and 2 isolated wetlands of $\leq 1/2$ acre
 - Filling Category 3 isolated wetlands of any size
 - Filling ephemeral streams
- ◆ General permit in response to removal of ephemeral streams and isolated wetlands from Waters of the United States
 - Notification, site restoration, and mitigation requirements





“Because these things will change”
Taylor Swift, “Change”

Subparts HH / HHH

National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Oil and Gas Facilities

- ◆ 40 CFR 63, Subpart HH: Oil and Gas Production
 - Major or area sources of HAP from glycol dehydration units or storage vessels and some compressors
- ◆ 40 CFR 63, Subpart HHH: Transmission / Storage
 - Major source of HAP from glycol dehydration units
- ◆ EPA is reviewing storage vessels and emissions of other than benzene, toluene, ethylbenzene, and xylene (BTEX) from glycol dehydrators
 - Proposal expected next year

Once-in, Always-in Repeal

NESHAP Program

- ◆ Once-in, Always-in was EPA guidance for NESHAP from 1995 through Jan. 2018
 - Once you become a major source, you could not “fall back” to an area source, even if emissions decreased
- ◆ EPA repealed guidance with new guidance
 - Guidance does not have the force of law
 - Ohio and many other states adopted new guidance
- ◆ EPA proposed a rule in 2019 that would allow facilities to reclassify as area sources
 - Final rule expected in Aug. 2020

Chemical Accident Prevention Provisions

- ◆ EPA has rescinded most of the 2017 amendments to the Risk Management Program (RMP)
 - Removed third-party compliance audits
 - Removed safer technology and alternatives analysis
 - Hazard review does not have to include findings from incident investigations
 - Removed root-cause analysis, 12-month investigation deadline, and investigations into destroyed / decommissioned processes



Chemical Accident Prevention Provisions

- ◆ EPA retained some of the 2017 amendments
 - Annual emergency coordination
 - Emergency response exercises
 - Public meeting within 90 days of a reportable accident
 - Update RMP to include new requirements
 - Hazard review must include opportunities for equipment malfunctions or human errors that could cause an accidental release

Chemical Accident Prevention Provisions

- ◆ Emergency Coordination / Exercise Requirements
 - Conduct emergency response notification annually
 - Conduct exercises to test emergency response plan, including deployment of personnel and equipment
 - Tabletop exercises every 3 years
 - Local emergency responders dictate frequency of field exercises (actual mobilization)
 - Facilities can conduct tabletop / field exercises without local emergency responder participation



Accidental Release Reporting

Chemical Safety & Hazard Investigation Board (CSB)

- ◆ Federal agency charged with investigating root cause(s) of major chemical incidents
 - 841 Investigations since 1998
 - Hurricane Harvey / Arkema Chemical Plant Fire, Crosby, TX (2017)
 - West Fertilizer Explosion & Fire, West, TX (2016)
- ◆ CSB created by 1990 Clean Air Act Amendments, using National Transportation Safety Board (NTSB) as a model
 - 1990 Clean Air Act Amendments required CSB to develop a rule requiring reporting of accidental releases into the ambient air



Accidental Release Reporting

Reporting of Accidental Releases

- ◆ 40 CFR, Part 1604 – effective Mar. 23, 2020
 - The owner or operator of a stationary source must report any accidental release of an extremely hazardous substance into the ambient air to CSB within 8 hours
- ◆ Separate from other accidental release reporting requirements
 - Occupational Safety and Health Administration (OSHA)
 - Environmental Protection Agency (EPA)
 - National Response Center (NRC)
 - State / Local Emergency Management Agencies (EMA)

Accidental Release Reporting

Releases must be reported within **8 hours** to CSB via report@csb.gov or 202–261–7600

Required Information

A) Owner/Operator name & contact information	G) Name(s) & Chemical Abstract Service number(s) of material(s) involved
B) Person name & contact information	H) Amount of release (if known)
C) Location information & facility identifiers	I) Number of fatalities (if known)
D) Time of release	J) Number of serious injuries (if known)
E) Description of release	K) Estimate property damage
F) Indication of fire, explosion, death, serious injury, and/or property damage	L) Evacuation Order: Number and type of people evacuated and zone radius

Note: If NRC notified, can submit NRC ID within 30 minutes instead of above

Accidental Release Reporting

CSB Accidental Release Reporting Terms

- ◆ Ambient Air: anything inside or outside of a source
- ◆ Extremely Hazardous Substance:
 - 140 substances listed in Title 40 of the Code of Federal Regulations (CFR) §68.130 Tables 1 through 4; OR
 - Any substance which death, serious injury, or substantial property damage
- ◆ Serious Injury: injury or illness that results in death or inpatient hospitalization
- ◆ Substantial property damage: damage estimate \geq \$1,000,000 (both inside and outside of source)

Accidental Release Reporting

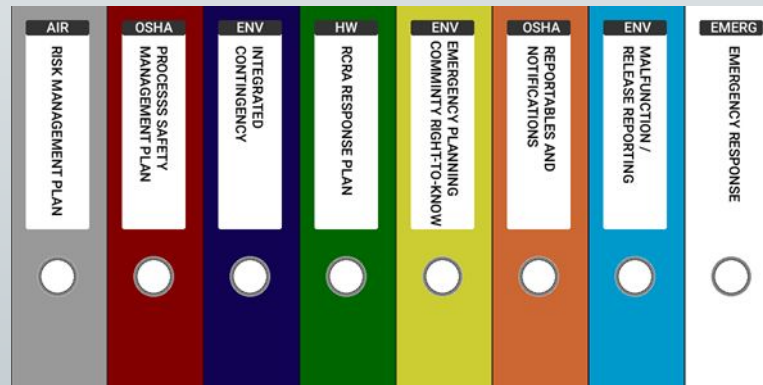
CSB vs NTSB Reporting

- ◆ CSB and NTSB have a 2002 Memorandum of Understanding (MOU) on jurisdiction
 - NTSB investigates loading, unloading, & transportation
 - CSB investigates processing, handling, or storage
- ◆ Regulation includes six potential categories:
 - Oil and gas: operations, extraction, drilling, and pipeline and related structure construction
 - Petroleum and petroleum product wholesalers
 - Site preparation contractors



Accidental Release Reporting

- ◆ Multiple environmental, health, and safety programs and plans may need amended
 - Chemical Accident Prevention / Risk Management
 - Process Safety Management
 - Integrated Contingency Plan
 - Local / State / Federal Response Plan
 - Environmental Notifications (EPCRA/CERCLA)
 - Health & Safety Notifications (OSHA)





“Gimme the future, gimme the future,
gimme the future”

Meat Loaf, “Modern Girl”

Future Forecasting

- ◆ **Ability for public to petition Guidance Documents**
 - Guidance must be approved by Presidentially-appointed EPA official at headquarters
- ◆ **Strengthening Transparency in Regulatory Science**
 - Scientific studies and models are excluded unless they conform to EPA requirements
- ◆ **Federalism vs States Rights**
 - EPA deferring more to states to manage their own environmental programs
 - States are expanding environmental management programs to fill void left by EPA

Questions?

NOTICE

**THANK YOU
FOR NOTICING THIS NOTICE**

YOUR NOTICING IT HAS BEEN NOTED

AND WILL BE REPORTED TO THE APPROPRIATE AUTHORITIES