

# EMERGING TOPICS

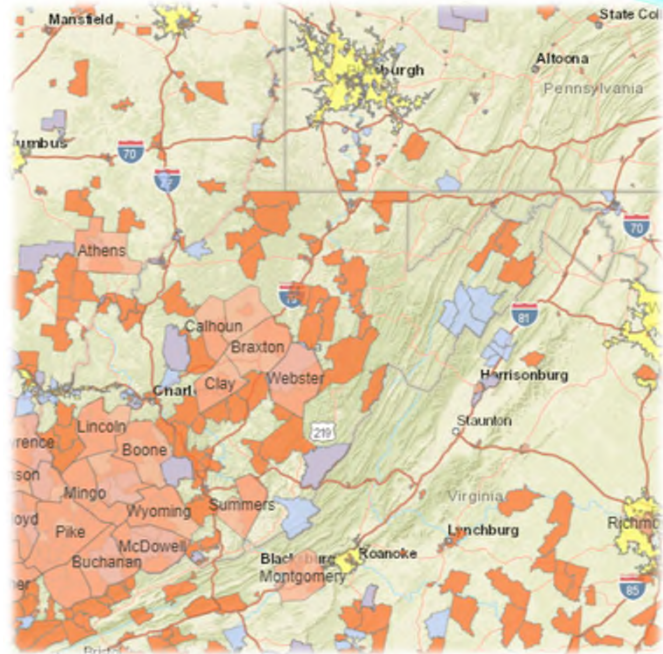
Mary Friend

## DISADVANTAGED AND UNDERSERVED

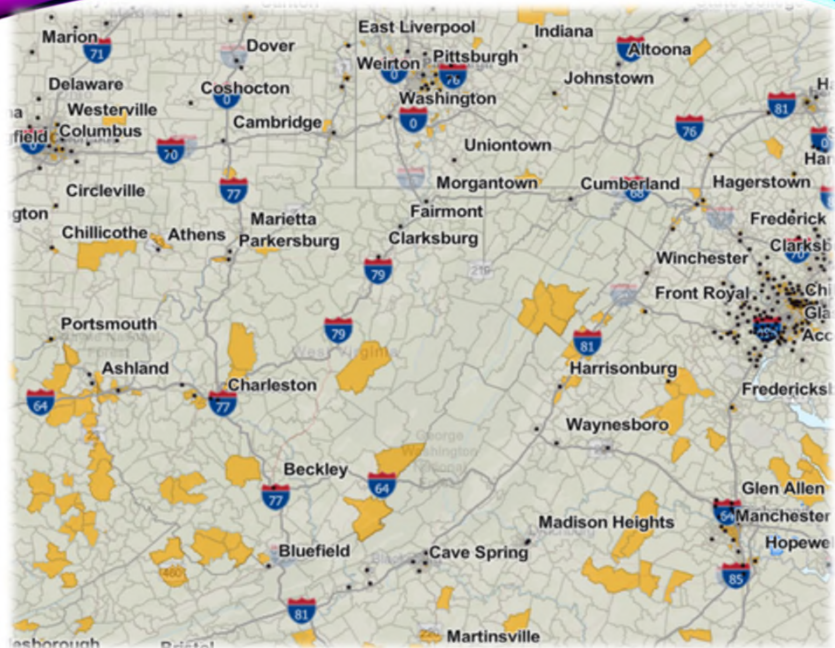
- Executive Order 13985 – Advancing Racial Equity and Support for Underserved Communities
  - Underserved – systematically denied full opportunity to participate in aspects of economic, social and civil life
  - Disadvantaged – marginalized and overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure and health care.

- Areas of persistent poverty and historically disadvantaged communities

- <https://maps.dot.gov/BT/S/GrantProjectLocationVerification/>



- USDOT Disadvantaged Census Tracts
- Thirty of 55 counties underserved
- [US Census](#)



Are you acquainted with the EO and its intent?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have any familiarity with available Disadvantaged Community (DAC) datasets? For example: CDC Social Vulnerability Index, PHMSA's Excavation Damage Incidents by DAC, PHMSA's HL Accident and GT Incident per mile by DAC. Instructions: List the data sets the operator identifies familiarity with.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you know where your pipeline facilities intersect DACs?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Instructions: If Yes, ask operator for listing or map for use in your inspection planning.	
Are there any policies/programs/procedures in place to address equity in DACs?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Instructions: If yes, ask operator to present them and review to ensure no disparity in activities from other areas.	
Does the frequency of your inspections of facilities within DACs differ from frequency of inspections of facilities outside of DACs?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Instructions: If Yes, describe the difference here.	
Are there any differences in your process for scheduling, executing, and completing work in DACs vs non-DACs?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Instructions: If Yes, describe the difference here.	
In the decision process of new construction pipeline routing, are routes through DACs vs non-DACs considered?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Instructions: If Yes, describe the process here.	

## DISADVANTAGED AND UNDERSERVED

- PHMSA has created new questions to address issue
- Used for integrated inspection
- States are NOT currently required to use the form

## PIPES ACT 2020 SECTION 114

- Section 114 of Act required PHMSA to determine adequacy of an inspection and maintenance plan in “eliminating hazardous leaks and minimizing releases of natural gas from pipeline facilities”
- “Self Executing” and required changes to operator O&M Plans
- Leak Detection ADB 21-01 published 6/10/2021
- Issues with Type B and Type C lines that are not required to have O&M plans

## **LEAK DETECTION**

**(RIN 2137- AF-51)**

- Two efforts required by the PIPES 2020 Act
- Rulemaking to address **Section 113** – Leak Detection and Repair
- Rulemaking will be considered based on the results of the studies and reports required by **Section 114** ( Study based on Inspection and Maintenance Plan Oversight and Best Technology/Practices Report to minimize NG releases)

## **LEAK DETECTION**

**(RIN 2137- AF-51)**

- Two efforts required by the PIPES 2020 Act
- Major topics under consideration include leak survey frequency, repairs of leaks, use of advanced technology, etc.
- Transmitted to OMB 2/13/23
- 2023 NPRM

## **LEAK DETECTION**

**(RIN 2137- AF-51)**

- Rulemaking to address Section 113 – Leak Detection and Repair
- Rulemaking will be considered based on the results of the studies and reports required by Section 114
- Leak survey frequency, repairs of leaks, reporting, use of advanced technology (leak vs emission), and vented emissions
- Section 114 is “Self Executing” and required changes to operator O&M Plans

## **CARBON DIOXIDE (CO<sub>2</sub>)**

- Added to Part 195 with Amdt 195-45 in 1991
  - Lake Nyos in Cameroon Africa killed >1700 persons
- Carbon Dioxide transported as supercritical liquid
  - §195.2 as >90% CO<sub>2</sub>
  - Enhanced oil recovery
- Carbon Sequestration
  - WV passed several bills allowing for injecting into abandoned field

## CARBON DIOXIDE (CO<sub>2</sub>)

- Major incident in Satartia MS in February 2020
  - Evacuation of ~ 200 people
  - Forty-five sought medical attention
- Resulted in ADB 22-01
  - Geotechnical hazards



## CARBON DIOXIDE (CO<sub>2</sub>)

- NPRM Stage for Parts 192 and 195
- Proposal due in 2023
- May include
  - Emergency preparedness
  - Dispersion and plume modeling
  - Leak detection
  - Fracture propagation

## HYDROGEN BLENDING INDUSTRY EFFORTS

- Use of blended hydrogen fuel is undergoing research by several major R&D organizations (GTI, Southwest Research, etc.)
- With the methane emissions focus by Congress and PHMSA, this will continue to be looked at with the goal of reducing greenhouse gas emissions
- Several pilot programs in process to assess how hydrogen will work with existing pipeline distribution systems, effects on materials, leak detection processes, etc.

## HYDROGEN BLENDING INDUSTRY EFFORTS

- In harmony with Section 113/114 of the PIPES Act, operators should be looking at ways to reduce emissions, including use of hydrogen (depending on results of the pilot programs)
- Potential issues
  - Leak detection and odorization
  - Affect on materials
  - Lower BTUs
  - Emergency response and training

## RENEWABLE NATURAL GAS (RNG)

- Includes biogas, landfill gas
- Installations have been completed in some states
- Gas quality and ability to be blended with existing natural gas supplies can be a critical issue and addressed in several ways



## RENEWABLE NATURAL GAS (RNG)

- Biogas facilities may serve one plant (powerplants, etc.) or are blended into a gas distribution system
- Some biogas facilities may have pipelines that may fall under the Gas Gathering Line regulations
- Building all over Midwest
- Issues with the building facilities outside of regulatory requirements



## “VIRTUAL” PIPELINES



## RENEWABLE NATURAL GAS (RNG)

- PHMSA continues to work with NASPR on looking at biogas issues and may issue or make available some guidance for those wishing to install biogas systems
- NAPSr created a RNG resources for operators
  - <http://www.napsr.org/resources.html>
  - Look for Biogas/RNG Resource Spreadsheet for Operators
- More information at
  - <https://www.rngcoalition.com/>

## REAUTHORIZATION

- PHMSA reauthorized every 4 years
  - Already working on next reauthorization
  - Every new rule affects regulators
  - NAPSR and ex parte rule
  - Money and support
    - USC 60107 up to 80% funding

## HOW TO BLOW UP A PIPELINE

- Based on 2021 book of same title
- Release date of April 7, 2023

- [How to blow up a pipeline](#)

Videos of How to Blow Up A Pipeline Trailer

bing.com/videos



How To Blow Up A Pipeline - Official Trailer - In Theaters April 7

1.5M views · 1 month ago

YouTube · NEON

