

Pipeline Safety



T R U S T

Credible.

Independent.

In the public interest.

CO₂ Pipeline Safety

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Pipeline Safety Trust History

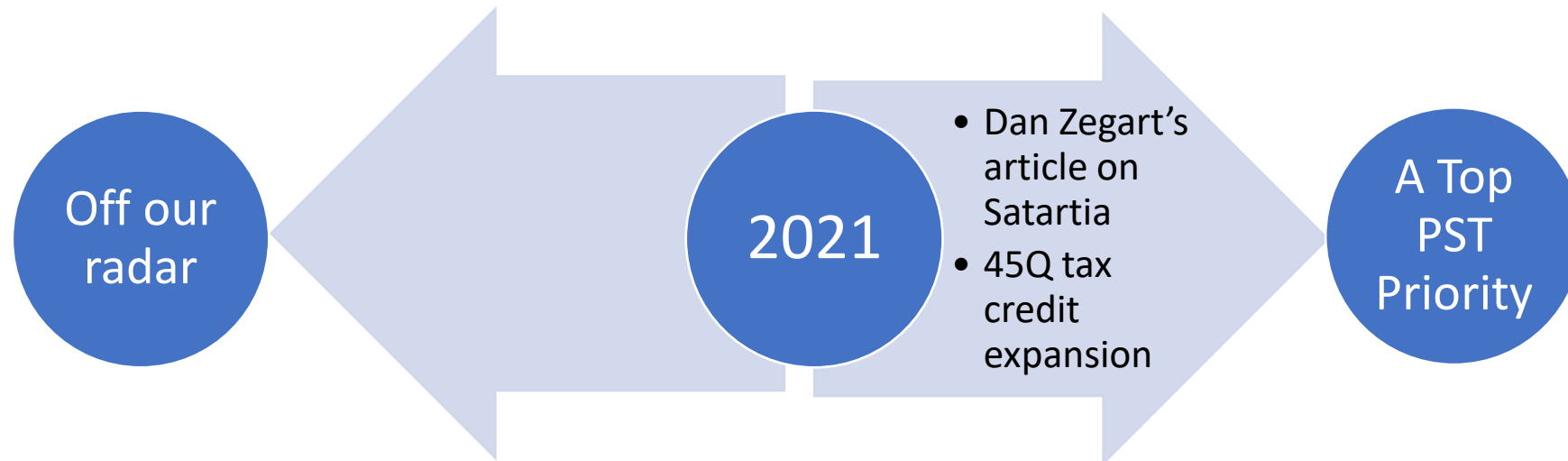


Guys.
I'm fishing. Will
be back before dark.
Homework is done.
♡ Liam



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PST and CO₂ Pipelines



CO₂ Pipelines - History

- 1986 – Lake Nyos, Cameroon tragedy
- 1988 – PHMSA final rule
- 2020 – Satartia, MS disaster
- 2021 – Bipartisan Infrastructure Bill
- 2022 – Inflation Reduction Act



CO₂ Pipeline Test Rupture

<https://www.dnv.com/oilgas/laboratories-test-sites/dense-phase-spadeadam-video.html>

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CO₂ Pipelines Report – Major findings

Carbon dioxide means a fluid consisting of more than 90 percent carbon dioxide molecules compressed to a supercritical state.



Potential Impact Area



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CO₂ Pipelines Report – Major findings

- Very narrow definition of CO₂ in the regulations
- Insufficient process to determine Potential Impact Areas
- Unique fracture propagation potential
- No requirement for odorant
- Emergency response requirements are lacking
- No standards on contaminants
- Insufficient regulations on conversion of existing pipeline

PHMSA's Response

- Satartia Accident Investigation Report
- Fine on Denbury
- Initiating a new rulemaking for CO₂ pipelines
- Funding new R&D projects

Challenges Ahead

- No congressional mandate
- Rulemaking will take years
- Statutory limitations



Figure 6. Failure Location (Upstream to Downstream)

Thank You!

- PST CO2 Pipeline Report and Backgrounder – <https://pstrust.org/carbon-dioxide-pipelines-dangerous-and-under-regulated/>
 - Article – [The Gassing of Satartia](#)
 - Video – [8" CO2 Pipeline Test Rupture](#)

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