





# **MStC - Taking the Mystery Out of Closing Remediation Projects**

## **National Tank Conference**

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Zach Pauley

Reimbursement Program

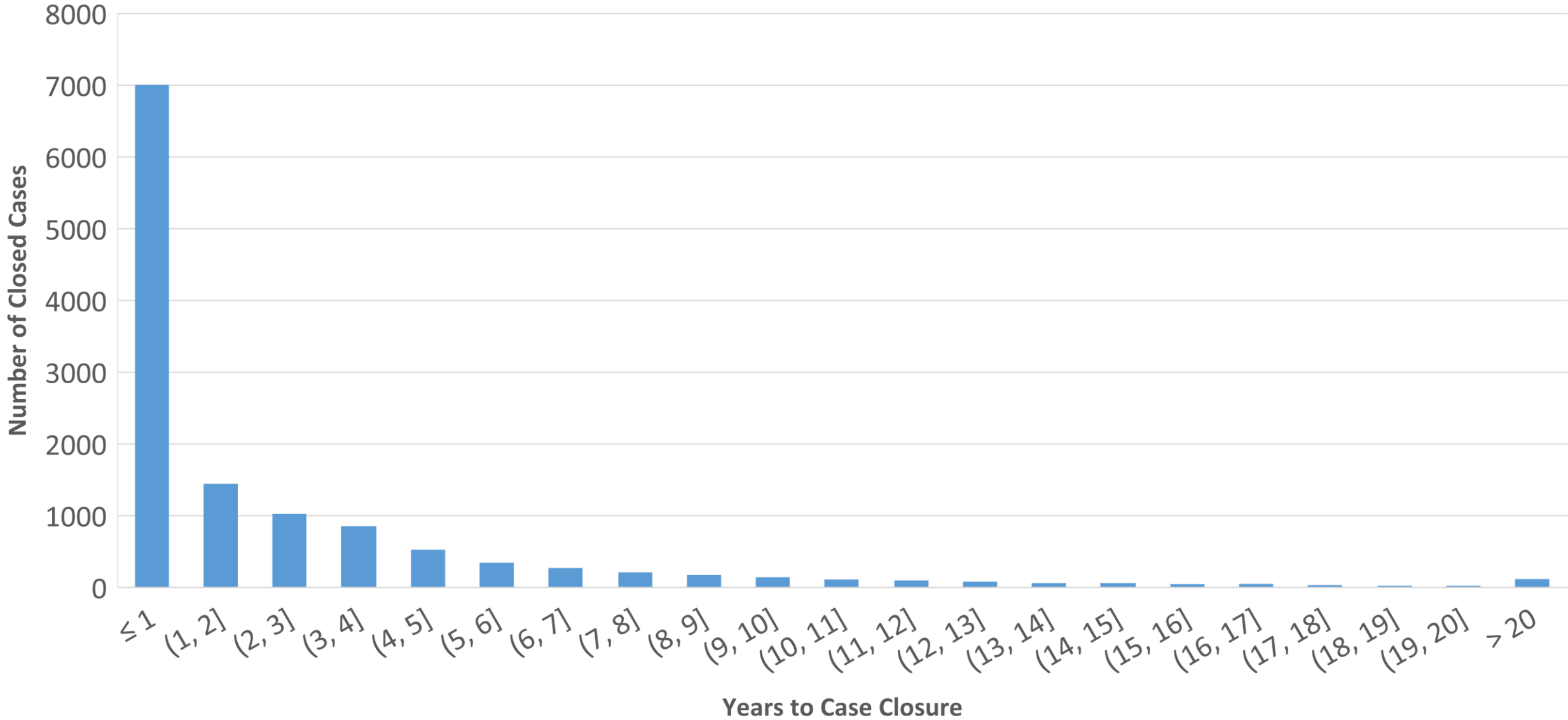
Virginia Department of Environmental Quality

September 15, 2022

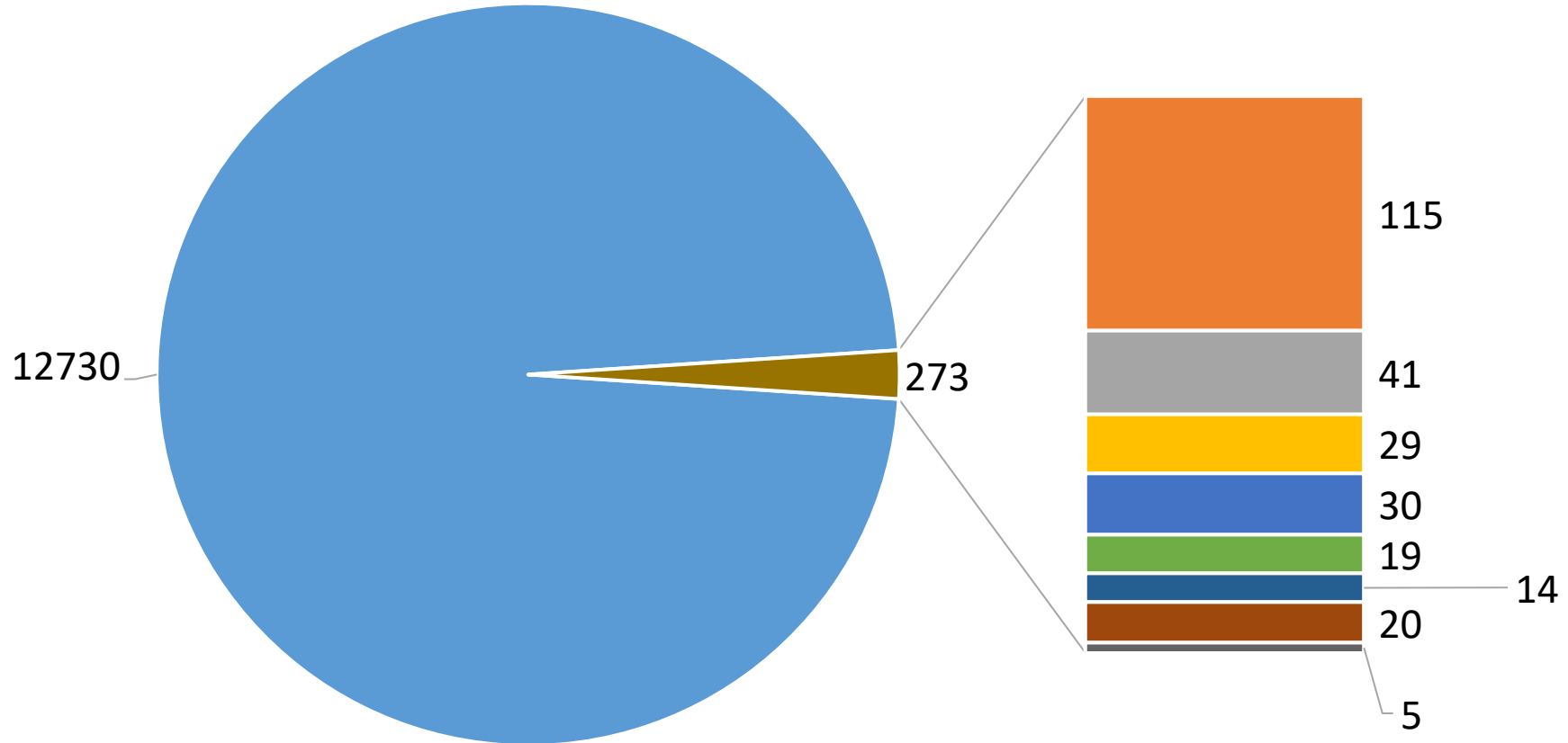
# Virginia's Cleanup Program: Fun Facts

- Risk-based cleanups
- 6 regional offices; 5 different physiographic provinces
- Reimbursement program available
  - \$1 million cap per release occurrence at a site
  - Work is pre-approved by case managers

# Virginia Tanks Program – Years to Case Closure



# Number of Federally Regulated Releases as of August 2022 & Years Open



■ Closed ■ [0-4] ■ [5-9] ■ [10-14] ■ [15-19] ■ [20-24] ■ [25-29] ■ [30-34] ■ [35-39]

# How We Jump-Started Addressing Case Backlog

Processes/Practices

Policies

# Practices – Do the Data Crawl!

Run monthly metrics reports

Run routine database queries that look for

- Overdue reports from consultants
- Overdue reviews from case managers
- Very high number of corrective action implementation reports

## Practices – Routine Meetings with Case Managers

- Annual High Dollar Site Meeting (the 700k Club)
  
- Annual Contaminated Drinking Water Well Meeting (some overlap)



# Policies (Tools) Developed

Developed as a result of staff input:

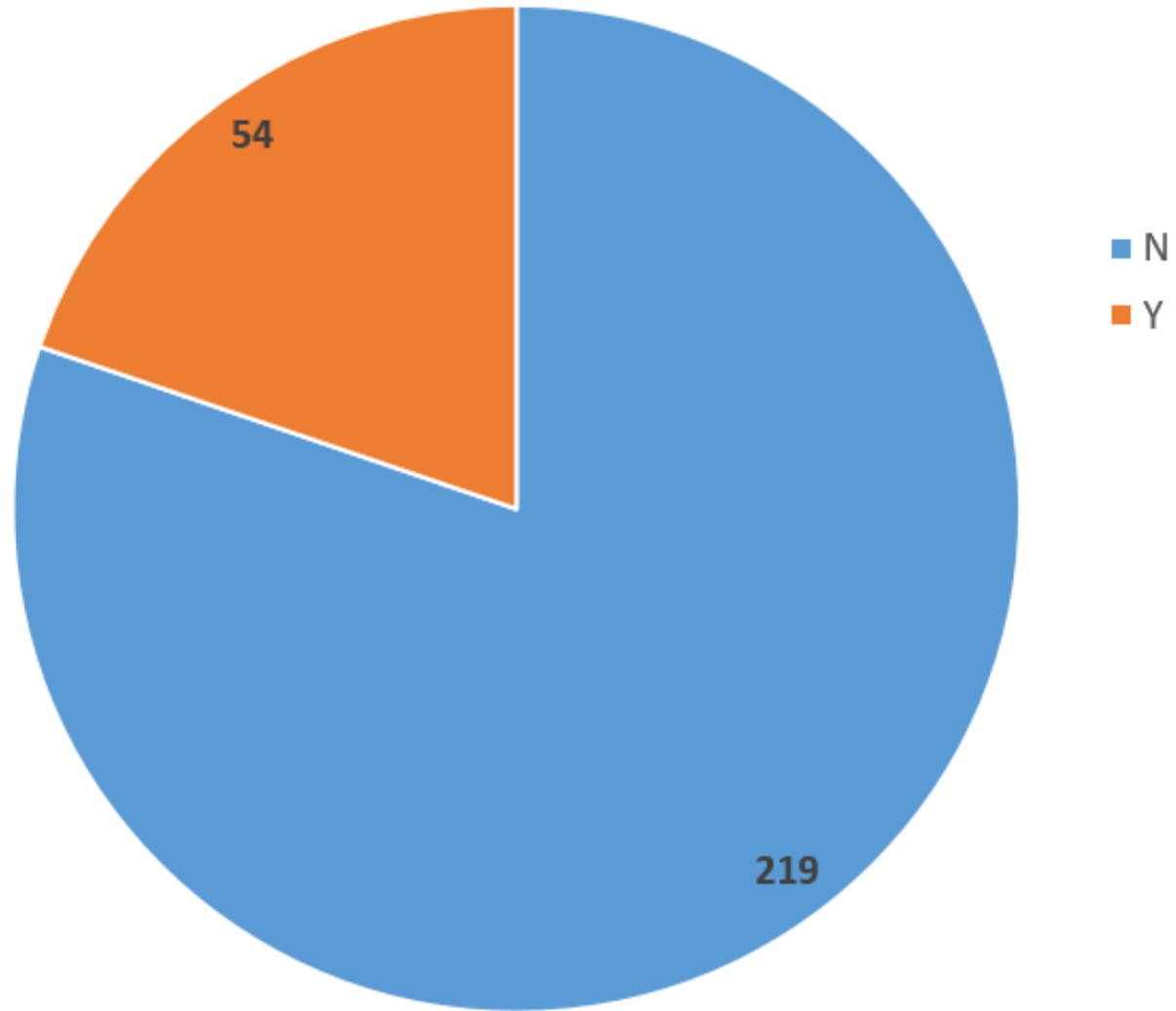
- **Providing Alternate Water Supplies**  
LPR-SRR-01-2013 Provision of Alternate Water Supplies to Operators of Petroleum-Impacted Water Supplies - Date: 6/13/2013
- **Closing Sites with Free Product**  
LPR-SRR-03-2012 Case Closure Evaluation of Sites with Free Product - Date: 12/28/2012

## Sites with Contaminated Drinking Water Wells

- Carbon Filtration Units (CFU) intended as a temporary source
- Permanent water supply is connection to new drinking water well or municipal water supply



### Open Sites with One or More Carbon Filtration Units (Y)



# Sites with Contaminated Drinking Water Wells

- Problems:
  - Trace amounts of contaminants
    - No location for a replacement well
    - Contaminant level below MCLs
- Solution:
  - Guidance developed using Risk Management Levels that allows DEQ to step away from the CFU through statistical analysis

# Closing Sites with Free Product

- Cases open for years due to the presence of free product
- What defines “to the maximum extent practicable”?
- Solution: Virginia crafted guidelines case managers and consultant could use to evaluate sites for closure despite LNAPL. It’s a tool.

# How thick is 0.01 feet? *1/8 inch*

- Just under the width of 2 quarters



- Just over the width of 2 dimes



# Closing Sites with Free Product - Guidance

- What IS this guidance, anyway?
  - It's a tool that staff can use as soon as product shows up
  - Requires multiple lines of evidence

# Closing Sites with Free Product – Guidance Outline

- LNAPL discussion/behavior
- Site Characterization and LNAPL Conceptual Site Model
  - Transmissivity
  - LNAPL Mobility and Migration
- CAPs and Lines of Evidence
- Closure of Cases



# Closing Sites with Free Product – Getting the Word Out

- Trained staff and consultants in new guidance and approach
- Brought in Jeff Kuhn from Montana DEQ for Transmissivity training for DEQ staff and consultants
- Hosted ITRC LNAPL in-person 2-day training for staff and consultants from Virginia and other states

## Interested in More Information?

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