

30 Years Old and Out: UST Removal Statistics and More...

26th National Tank Conference & Exposition
Galt House Hotel – Louisville, Kentucky
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Presented by Paul Clark



Connecticut Department of Energy and Environmental Protection



Then and Now: Shallow Groundwater and Bedrock



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Take Away Points

- Enforce Life Expectancy Regulation – 30 years
- UST Removal Statistics and Closure Inspections
 - 2015 to 2018 (Historic/Unknown)
- Birth of New Policy - 10 Year Extension
- Secure File Transfer Website – Handle the load



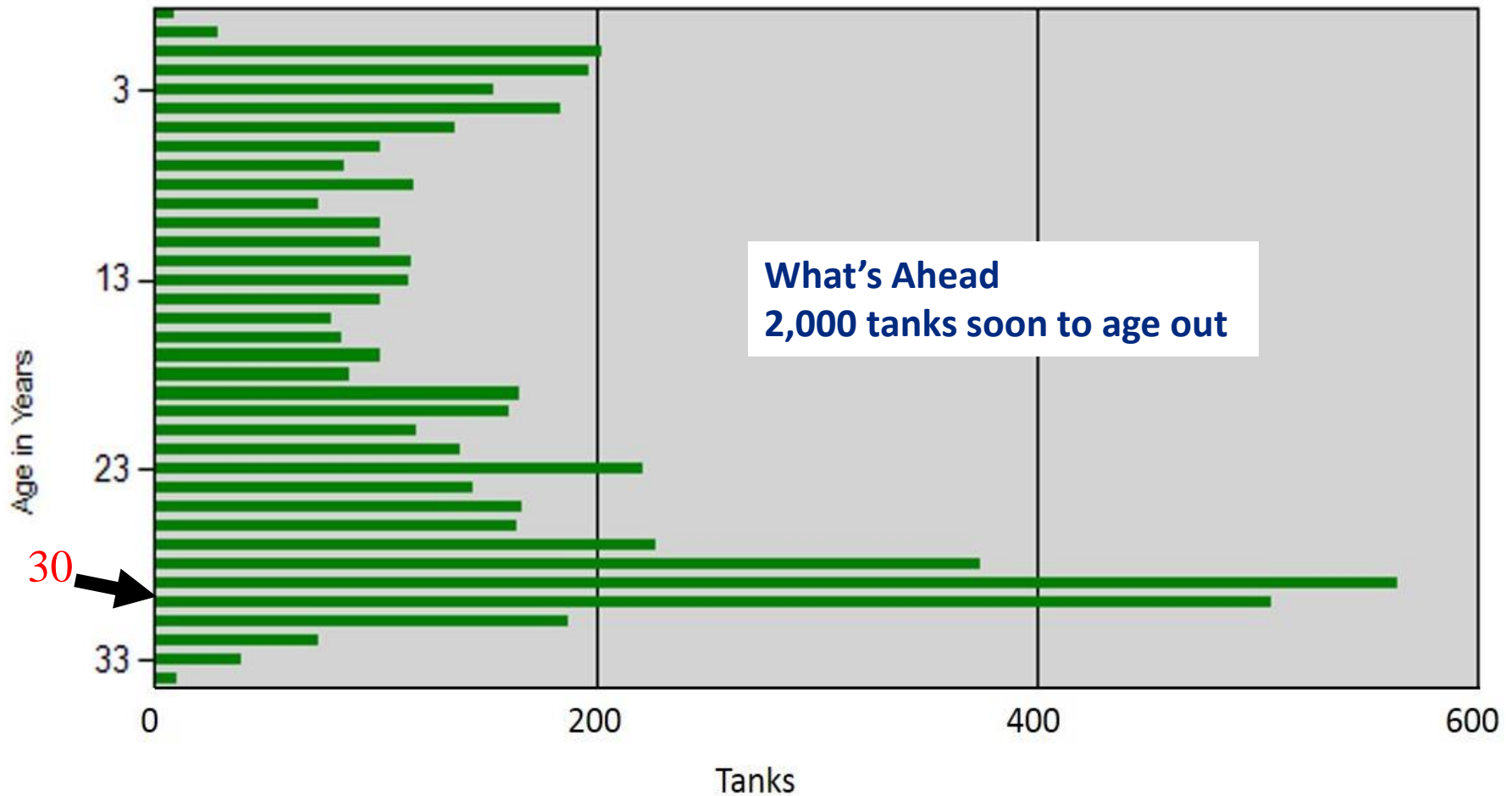
Origin of 30 Year Life Expectancy

- November 1, 1985: CT's UST Regulations Section 22a-449(d)-1(h)
- Life expectancy is based on manufacturers warranty
- Stip-3 and Xerxes have 30-year performance warranties



Ages of Federally Regulated USTs

Age vs Tank Count 2018



Federally Regulated USTs in CT

- In 1992, there were 34,792 active USTs at ~11,000 facilities
- Currently, there are 5,712 active USTs at 2,176 facilities
- During the last 3* years, ~1,000 federally regulated USTs were removed from 459 UST facilities

* July 19, 2015 through July 18, 2018



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Then – Reactive

- 1985 & 1994: Forming Regulations
- 1988 to 1998: Bare-steel UST closures
- DEEP's Spills Unit and cleanup contractors busy mitigating impacts from bare-steel USTs
- Cleanup technology and state regulations were new but evolving
- Regulated compound list was not as comprehensive (TPH,8010/8020)
- The beginning of the LUST backlog



Now – Proactive

- Remediation Standard Regulations - 1996
- Pre-Removal Outreach (2015)
 - UST removal notification requirement- 30 days prior
 - Sampling and Analytical guidance (expectations) including RCPs, DQA/DUE
- UST Closure Inspections (50/year)
- Electronic submittal of reports (2017)
- Facilitates LUST Closure



Sampling and Analytical Guidance

Petroleum Product	Analytical Methods
Gasoline	8260 or VPH (carbon ranges and target compounds) or VPH (carbon ranges only) and 8260
Diesel	ETPH, 8260 and 8270 or EPH and VPH (carbon ranges and target compounds for each method)





Now: Oversight leads to comprehensive cleanup

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A Statistical Look at all Releases Discovered in the Last 3 years

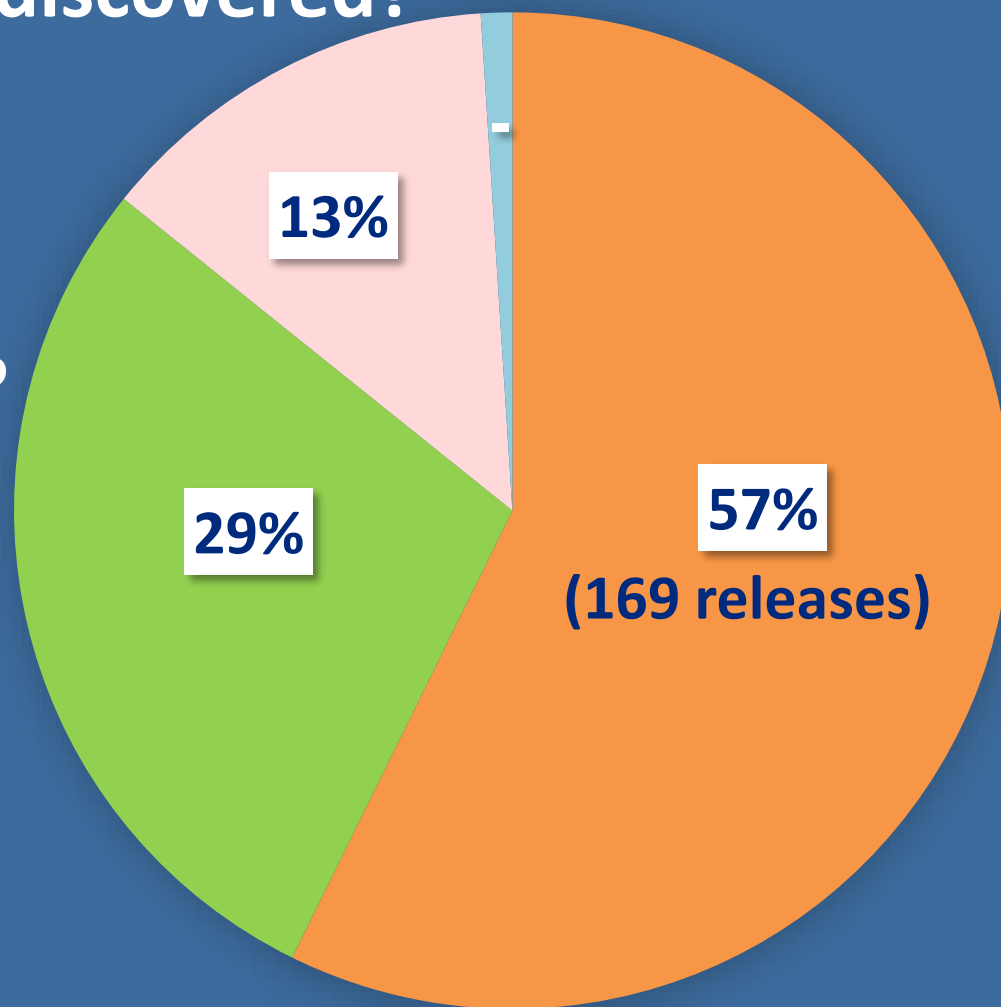


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295 Releases were Discovered in the Last 3 years

How the releases were discovered?

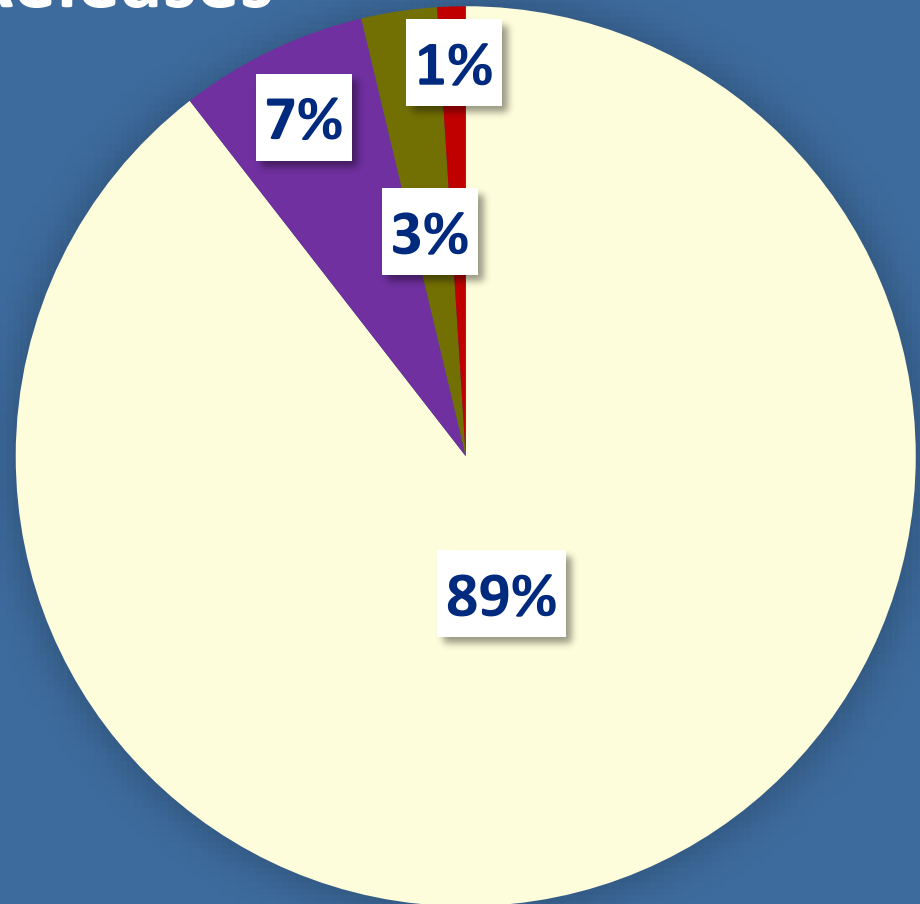
- UST Removals/Closures
- Visual/Reported to DEEP
- Site Assessments
- Other



Source/cause of Releases Discovered in Last 3 Years

Sources/Causes of 295 Releases

- Historic/Unknown
- Damage to UST system
- Tank - corrosion
- Other



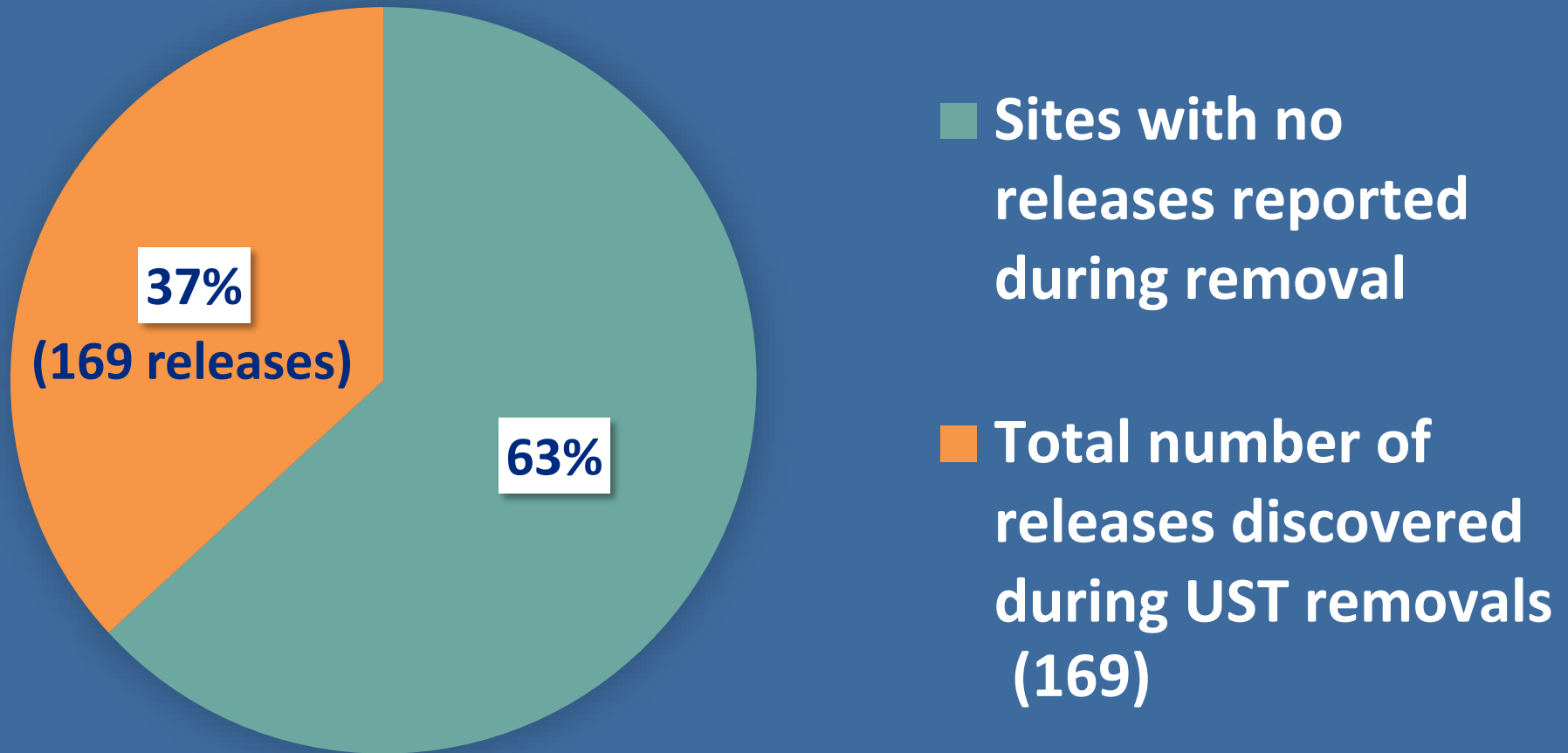
UST Removal Statistics for the Last 3 Years



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USTs Removals in the Last 3 Years

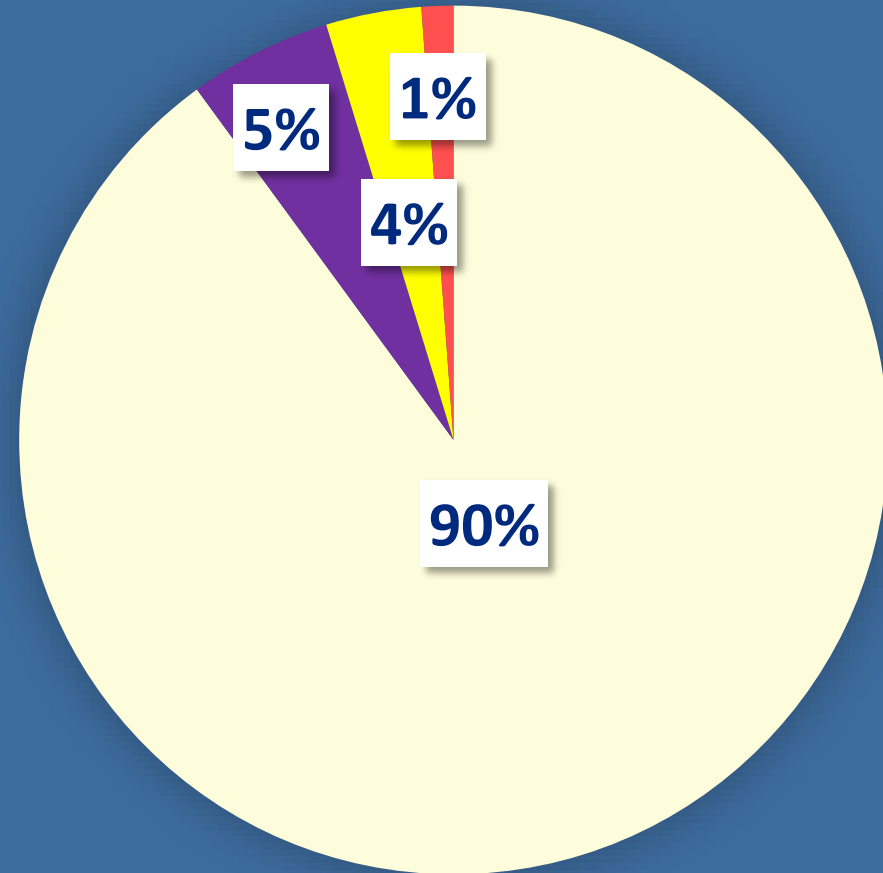
459 Sites with USTs removed in last 3 years



Source/Cause of Releases Discovered During UST Removals

169 releases were reported during UST removals

- Historic/Unknown
- Damage to UST system
- Corrosion in orphaned tank
- Corrosion in current tank



Only 25 of the all Releases were
from Active Tanks

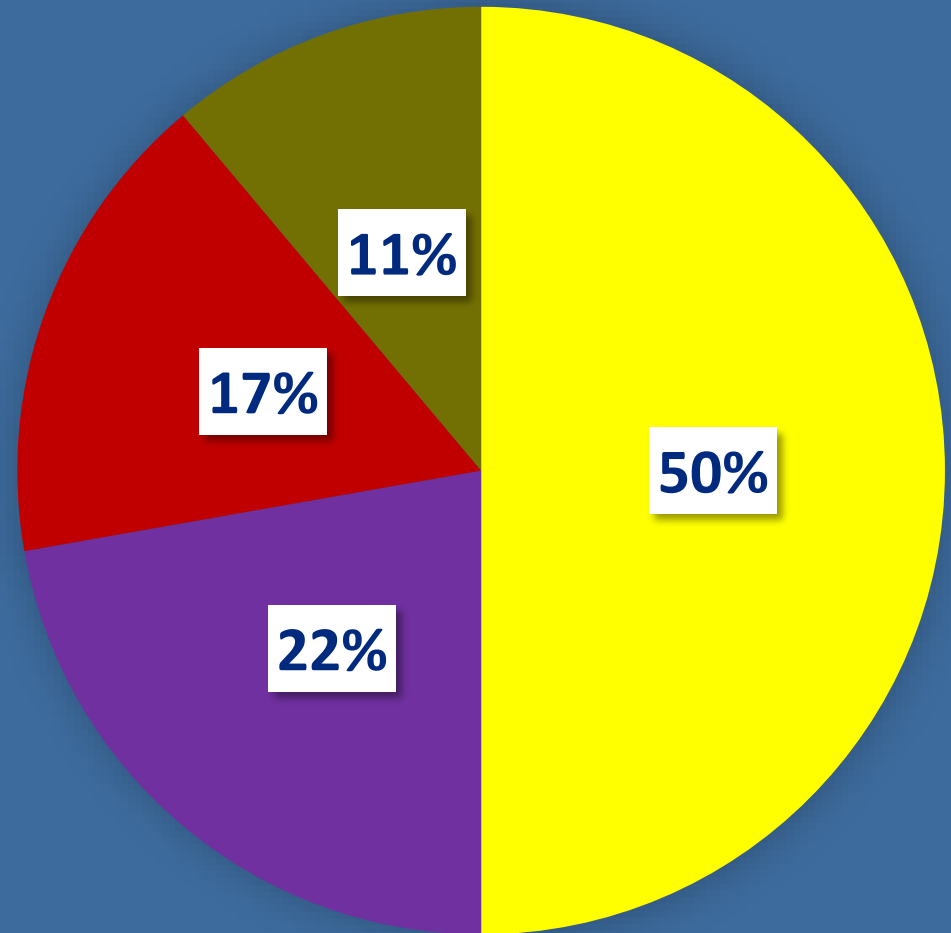


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Breakdown of the 25 Releases from Active Systems in Last 3 Years

Sources/causes of releases from active sites

- Damage to Dispenser
- Damage to UST system
- Other
- Tank - corrosion



Approval of Extended Life Expectancy

- Removal statistics and field closure observations formed the basis for the commissioner to approve an alternative life expectancy in 2016
- Extended life expectancy for up to 10 years with the following caveats: (80 sites)
 - Eligibility Requirements- (fiberglass UST's, non-metallic piping, containment sumps w/sensors, tightness testing, interstitial testing, no water supply wells)
 - Maintaining Eligibility: Annual tank and semi-annual piping testing



Path to Paperless

Buzz Words:

ezFile

Secure File Transfer

FileNet Viewer

Taxonomy

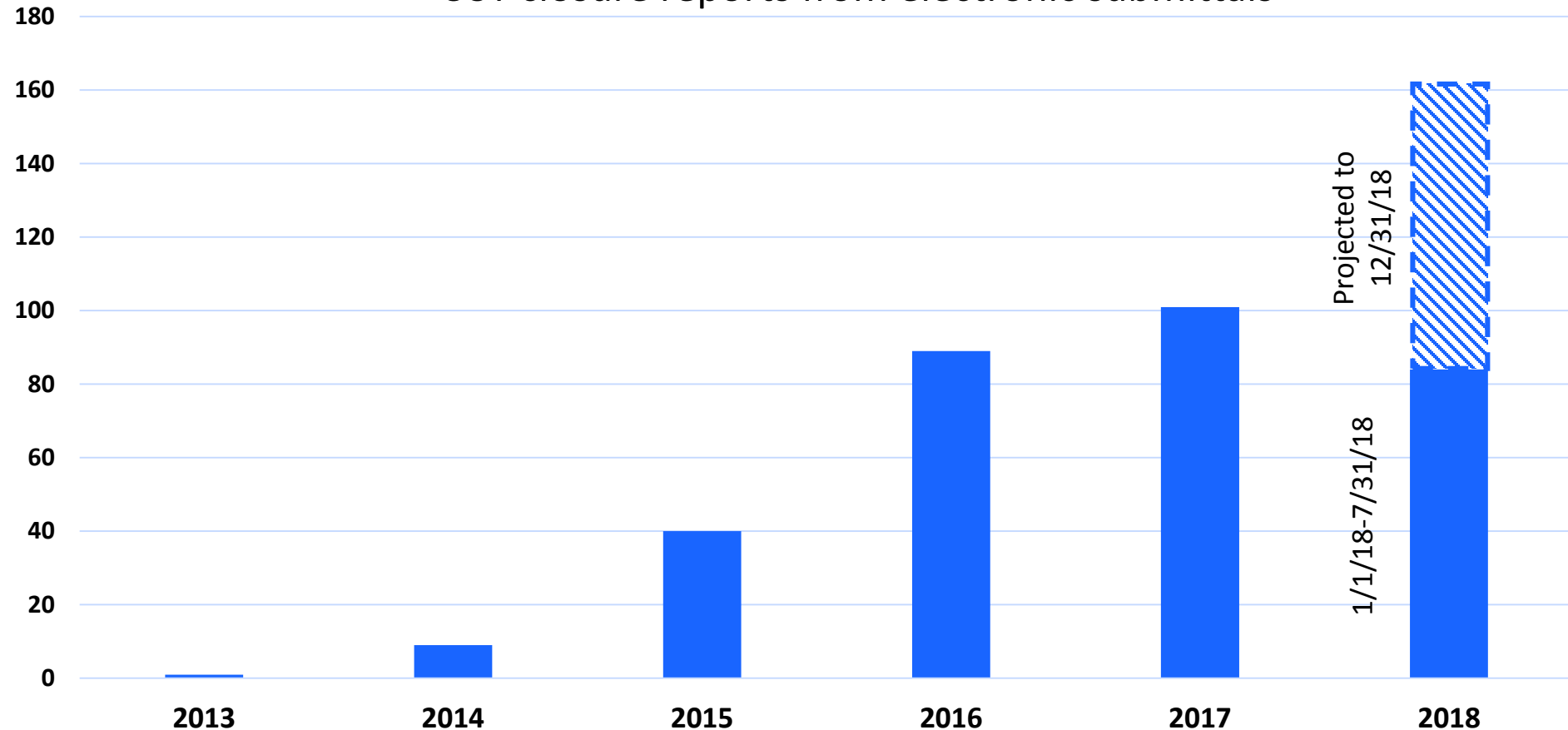
Indexing



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Electronic Filings on the Rise

UST closure reports from electronic submittals



EZfile started 2013 and secure file transfer website in 2017



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More Removal = More Reports



- ~2,000 USTs are reaching their lifetime expectancy, we expect ~500 closure reports
- 500 closure reports is ~ 30 banker boxes of paper!
- Electronic reports save space and the environment!



Transitioning to Electronic

- Obtained access to State Library approved electronic repository (“FileNet”)
- Developed standardized taxonomy and acceptable document format
- Established secure file transfer website (SFT) to receive documents from the public (2017)
- Created instructions for use of the document transmittal website



Electronic Submittal Procedures

- Owners/operators upload documents to SFT
- LUST staff manually indexes and saves documents in “FileNet”
- LUST staff “links” documents in FileNet to the LUST Access database
- Two paths to FileNet: EZFile and via SFT



Pros and Cons

Pros

- No paper saves space and the environment
- FOIA requests are easier to fulfill
- Documents are easier to share, find, & review

Cons

- FileNet Viewer is slow and tedious to use
- Care is needed with manual indexing so that documents can be found



Sure Busy in CT

- Statistics 2015 to 2018 (historic/unknown)
 - 1,000 tanks at 459 sites (170 releases)
- Upfront Engagement (guidance, timely follow-up, risk reduction)
- Secure File Transfer Website/LUST Closures
- Future State: 2018 to 2022
 - 2,000 tanks at maybe 800 sites (400 releases)



Acknowledgement

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