# Importance of Addressing Data Completeness and Data Quality Issues to Achieve the NCI Goals

#### **Beth Ragnauth**

U.S. EPA | OECA | Office of Compliance | Planning, Measures and Oversight Division

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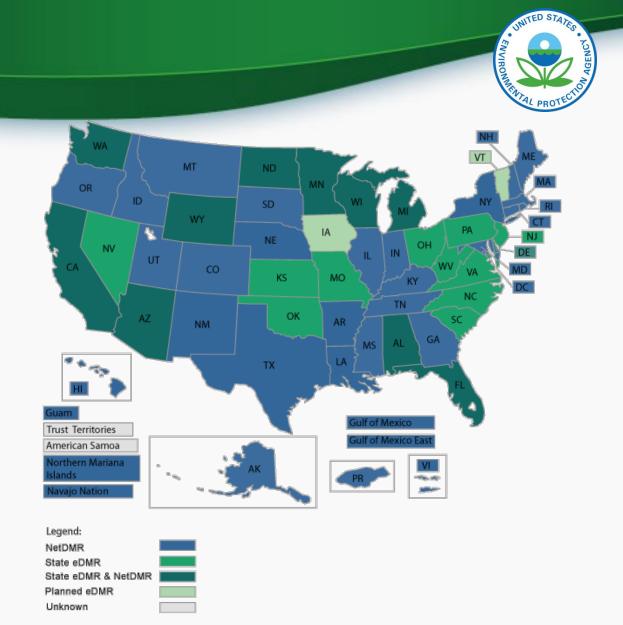
### **Data Quality and Completeness**

- Where we are:
  - What is the current status of data completeness and quality?
  - What has the SNC rate reduction effort done so far to improve data issues?
- Where we need to be:
  - How much do we need to do?
  - Where should we focus efforts to get the biggest impact most efficiently?



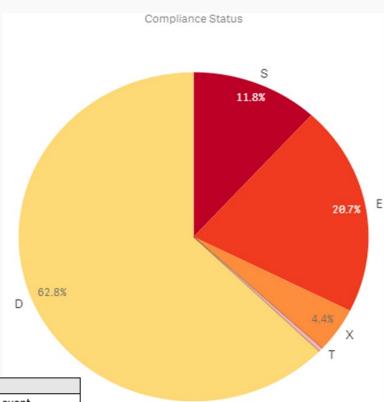
#### Where we are

- Approx. 41,800 permits with sufficient data in ICIS-NPDES to include in quarterly SNC rate calculation
  - ~4,000 permits still need to have this permit-level data complete
- Range of individual permit universes in authorized programs from six states with under 100 permits to >2,000 in five states – and everywhere in between
- A BUNCH of data systems ICIS-NPDES, NetDMR, state eDMR systems, state data systems (often more than one per state)





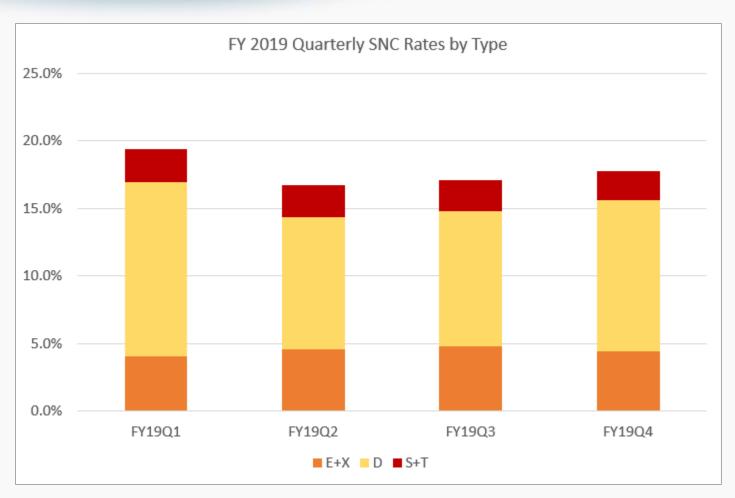
## **SNC** by Type



## Quarterly SNC status for FY2019Q4, from SNC Dashboard 1/8/2020

Code	Status	Level	Description
s	Noncompliant	SNC/Cat. 1	Enforcement action or permit compliance schedule event violation - more than 90 days late
E	Noncompliant	SNC/Cat. 1	Effluent violations of monthly average limits
X	Noncompliant	SNC/Cat. 1	Effluent violations of non-monthly average limits
т	Noncompliant	SNC/Cat. 1	Enforcement action or permit compliance report violation > 30 days late
D	Noncompliant	SNC/Cat. 1	Reporting violation - non-receipt of DMR





Data from SNC dashboard as of official QNCR date for that quarter's data



### DMR non-receipt SNC

- Permittee doesn't submit entire DMR, or submits an "invalid" no data indicator (NODI) code for entire DMR
  - Status persists for 2 years unless violations are resolved
- Permittee submits DMR, but the data doesn't get into ICIS-NPDES
- Missing DMR data masks effluent violations
- How much is true non-submittal of data? How much would show SNC-level effluent violations if the data were in ICIS?



# Enforcement Action or Permit Compliance Schedule Events

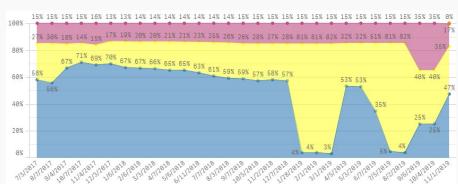
- Milestone dates may be in ICIS, but completion dates are not entered
- Violations persist until order closed
- Completeness of enforcement action data?



### Additional Challenges

- Data transfer issues can be multi-faceted
  - Multiple issues may need to be addressed to improve data completeness substantially
- Technical issues are not the only barrier to improved data completeness
- Good data quality/completeness doesn't necessarily stay that way







### **Efforts Underway**

- Each EPA region is working with a priority state to resolve individual data issues
- ICIS-NPDES training webinars
- Other efforts to address some national data quality issues (e.g., NODI code sub-group, updating reference tables)



# Data Quality and DMR Non-receipt Subgroup Efforts

- 6 tasks identified at 2019 workgroup symposium in Atlanta for subgroup work:
  - Create a soft-error notification in NetDMR to alert for invalid NODI code submission (done)
  - Develop handbook for investigating SNC in data (2<sup>nd</sup> draft under review by subgroup)
  - Propose routine nation-wide re-runs of RNC processing
  - Propose standard practices for manual resolution of DMR nonreceipt violations
  - Enhanced DMR non-submission notification
  - Improving what we can tell about SNC from data we have



# Data Completeness Critical to Achieving NCI Goals

- Improve analysis about non-compliance issues and their root causes
- Accurately identify facilities for state/EPA discussion
- 60% of current SNC is DMR non-receipt; must address to achieve our overall 50% reduction from the baseline
- About 4,000 permits per quarter are in SNC for DMR non-receipt, and that is the highest noncompliance status for >5,000 permits each year



### Goals

- Get permit data complete and compliance tracking on for full active individual permit universe so we can include all individual permits in rate calculation and analysis
- Resolve data transfer issues between state databases and ICIS-NPDES, including processes and controls to monitor and maintain data quality once achieved
- Address true non-submission of required monitoring data



#### Where to Focus

- Ensure compliance status reflects underlying data
- Schedule event completion dates
- Identify "low-hanging fruit" issues in states with substantial data completeness issues
- Continuous engagement with states working on data issues
- Compliance assistance or enforcement (as appropriate) where non-submittal of data is causing SNC